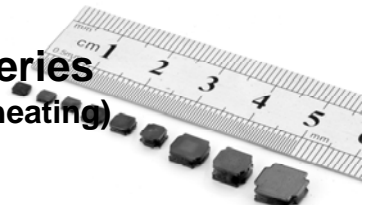


# Wire Wound SMD Power Inductors – SWPA Series

Operating temperature range: -40°C~+125°C (Including self-heating)



## FEATURES

- Magnetic-resin shielded construction reduces buzz noise to ultra-low levels
- Metallization on ferrite core results in excellent shock resistance and damage-free durability
- Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI)
- 30% higher current rating than conventional inductors of equal size
- Takes up less PCB real estate and save more power

## APPLICATIONS

- LED Lighting
- Flat-screen TVs, blue-ray disc recorders, set top box, movie cameras, smart phone
- Notebooks, desktop computers, servers, graphic cards cards
- Portable gaming devices, personal navigation systems, personal multimedia devices
- Telecomm base stations
- VR, AR

## PRODUCT IDENTIFICATION

SWPA      3012      S      1R0  
 ①                      ②                      ③                      ④

N      T      □□□  
 ⑤                      ⑥                      ⑦

| ① Type |                               |
|--------|-------------------------------|
| SWPA   | Wire Wound SMD Power Inductor |

| ③ Feature Type |          |
|----------------|----------|
| S              | Standard |

| ④ Nominal Inductance |               |
|----------------------|---------------|
| Example              | Nominal Value |
| 1R0                  | 1.0μH         |
| 100                  | 10μH          |

| ⑤ Inductance Tolerance |      |
|------------------------|------|
| K                      | ±10% |
| M                      | ±20% |
| N                      | ±30% |

| ⑥ Packing |                      |
|-----------|----------------------|
| T         | Tape Carrier Package |

| ⑦ Design Code |                           |
|---------------|---------------------------|
| □□□           | Standard product is blank |

| ② (L×W×H) [mm]<br>External Dimensions (L×W×H) [mm] |             |
|--|-------------|
| 252010   | 2.5×2.0×1.0 |
| 252012   | 2.5×2.0×1.2 |
| 3010   | 3.0×3.0×1.0 |
| 3012   | 3.0×3.0×1.2 |
| 3015   | 3.0×3.0×1.5 |
| 4010   | 4.0×4.0×1.0 |
| 4012   | 4.0×4.0×1.2 |
| 4018   | 4.0×4.0×1.8 |
| 4020   | 4.0×4.0×2.0 |
| 4026   | 4.0×4.0×2.6 |
| 4030   | 4.0×4.0×3.0 |
| 5012   | 5.0×5.0×1.2 |
| 5020   | 5.0×5.0×2.0 |
| 5040   | 5.0×5.0×4.0 |
| 6020   | 6.0×6.0×2.0 |
| 6028   | 6.0×6.0×2.8 |
| 6040   | 6.0×6.0×4.0 |
| 6045   | 6.0×6.0×4.5 |
| 8040   | 8.0×8.0×4.0 |
| 8050   | 8.0×8.0×5.0 |
| 8065   | 8.0×8.0×6.5 |

# SHAPE AND DIMENSIONS

Fig.1

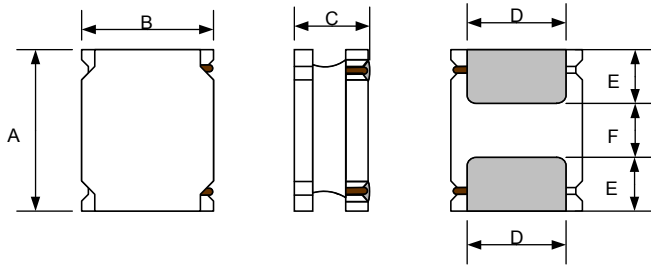


Fig.2

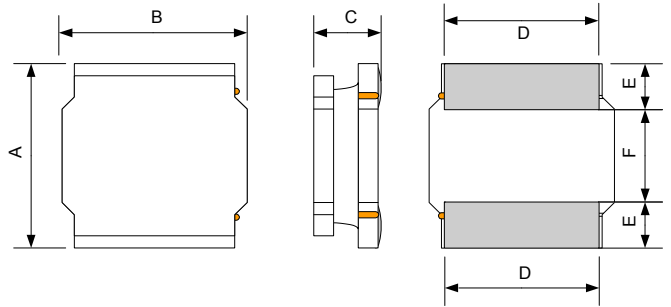
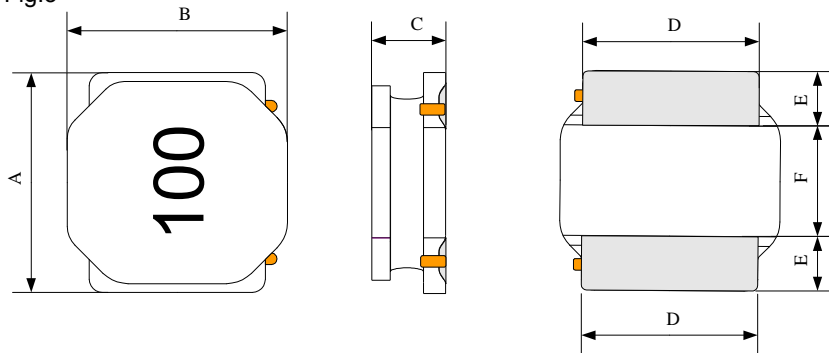
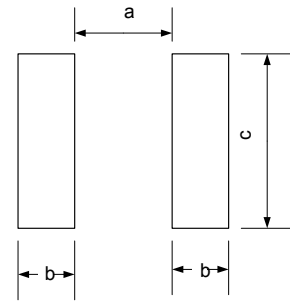


Fig.3



Recommended Land Pattern



Unit: mm

| Series      | Shape | A       | B       | C        | D       | E        | F        | a Typ. | b Typ. | c Typ. |
|-------------|-------|---------|---------|----------|---------|----------|----------|--------|--------|--------|
| SWPA252010S | Fig.1 | 2.5±0.1 | 2.0±0.1 | 1.0 Max. | 1.5±0.2 | 0.80±0.2 | 0.80±0.2 | 0.80   | 0.85   | 2.0    |
| SWPA252012S | Fig.1 | 2.5±0.1 | 2.0±0.1 | 1.2 Max. | 1.5±0.2 | 0.80±0.2 | 0.80±0.2 | 0.80   | 0.85   | 2.0    |
| SWPA3010S   | Fig.2 | 3.0±0.2 | 3.0±0.2 | 1.0 Max. | 2.5±0.2 | 0.75±0.2 | 1.5±0.2  | 1.5    | 0.8    | 2.7    |
| SWPA3012S   | Fig.2 | 3.0±0.2 | 3.0±0.2 | 1.2 Max. | 2.5±0.2 | 0.75±0.2 | 1.5±0.2  | 1.5    | 0.8    | 2.7    |
| SWPA3015S   | Fig.2 | 3.0±0.2 | 3.0±0.2 | 1.5 Max. | 2.5±0.2 | 0.75±0.2 | 1.5±0.2  | 1.5    | 0.8    | 2.7    |
| SWPA4010S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 1.0 Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9    | 1.1    | 3.7    |
| SWPA4012S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 1.2 Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9    | 1.1    | 3.7    |
| SWPA4018S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 1.8 Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9    | 1.1    | 3.7    |
| SWPA4020S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 2.0 Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9    | 1.1    | 3.7    |
| SWPA4026S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 2.6 Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9    | 1.1    | 3.7    |
| SWPA4030S   | Fig.2 | 4.0±0.2 | 4.0±0.2 | 3.0 Max. | 3.3±0.2 | 0.95±0.2 | 2.1±0.2  | 1.9    | 1.1    | 3.7    |
| SWPA5012S   | Fig.3 | 5.0±0.2 | 5.0±0.2 | 1.2 Max. | 4.0±0.2 | 1.25±0.2 | 2.5±0.2  | 2.3    | 1.4    | 4.2    |
| SWPA5020S   | Fig.3 | 5.0±0.2 | 5.0±0.2 | 2.0 Max. | 4.0±0.2 | 1.25±0.2 | 2.5±0.2  | 2.3    | 1.4    | 4.2    |
| SWPA5040S   | Fig.3 | 5.0±0.2 | 5.0±0.2 | 4.0 Max. | 4.0±0.2 | 1.25±0.2 | 2.5±0.2  | 2.3    | 1.4    | 4.2    |
| SWPA6020S   | Fig.2 | 6.0±0.3 | 6.0±0.3 | 2.0 Max. | 4.9±0.3 | 1.55±0.3 | 2.9±0.3  | 2.8    | 1.7    | 5.7    |
| SWPA6028S   | Fig.2 | 6.0±0.3 | 6.0±0.3 | 2.8 Max. | 4.9±0.3 | 1.55±0.3 | 2.9±0.3  | 2.8    | 1.7    | 5.7    |
| SWPA6040S   | Fig.2 | 6.0±0.3 | 6.0±0.3 | 4.0 Max. | 4.9±0.3 | 1.55±0.3 | 2.9±0.3  | 2.8    | 1.7    | 5.7    |
| SWPA6045S   | Fig.2 | 6.0±0.3 | 6.0±0.3 | 4.5 Max. | 4.9±0.3 | 1.55±0.3 | 2.9±0.3  | 2.8    | 1.7    | 5.7    |
| SWPA8040S   | Fig.2 | 8.0±0.3 | 8.0±0.3 | 4.2 Max. | 6.3±0.3 | 2.00±0.3 | 4.0±0.3  | 3.8    | 2.2    | 7.5    |
| SWPA8050S   | Fig.3 | 8.0±0.3 | 8.0±0.3 | 5.0 Max. | 6.3±0.3 | 2.00±0.3 | 4.0±0.3  | 3.8    | 2.2    | 7.5    |
| SWPA8065S   | Fig.3 | 8.0±0.3 | 8.0±0.3 | 6.5 Max. | 6.3±0.3 | 2.00±0.3 | 4.0±0.3  | 3.8    | 2.2    | 7.5    |

※\*1: All products are printed with Marking except the 252010S, 252012S, 3010S, 3012S and 3015S series.

## SPECIFICATIONS

### SWPA252010S Series

| Part Number      | Inductance | DC Resistance |       | Self-resonant Frequency | Saturation Current <sup>*3</sup> |      | Heat Rating Current <sup>*4</sup> |      |
|------------------|------------|---------------|-------|-------------------------|----------------------------------|------|-----------------------------------|------|
|                  | @100kHz,1V | Max.          | Typ.  | Min.                    | Max.                             | Typ. | Max.                              | Typ. |
| Units            | µH         | Ω             |       | MHz                     | A                                |      | A                                 |      |
| Symbol           | L          | DCR           |       | S.R.F                   | Isat                             |      | Irms                              |      |
| SWPA252010SR47NT | 0.47±30%   | 0.056         | 0.047 | 206                     | 2.50                             | 3.35 | 2.35                              | 2.56 |
| SWPA252010SR56NT | 0.56±30%   | 0.072         | 0.060 | 160                     | 2.90                             | 3.20 | 2.00                              | 2.18 |
| SWPA252010SR68NT | 0.68±30%   | 0.074         | 0.062 | 129                     | 2.20                             | 2.75 | 2.00                              | 2.18 |
| SWPA252010S1R0NT | 1.0±30%    | 0.108         | 0.090 | 100                     | 1.85                             | 2.20 | 1.65                              | 1.80 |
| SWPA252010S1R5NT | 1.5±30%    | 0.182         | 0.152 | 81                      | 1.80                             | 2.10 | 1.30                              | 1.42 |
| SWPA252010S2R2NT | 2.2±30%    | 0.209         | 0.174 | 61                      | 1.20                             | 1.60 | 1.20                              | 1.31 |
| SWPA252010S3R3MT | 3.3±20%    | 0.328         | 0.273 | 47                      | 1.05                             | 1.30 | 0.90                              | 0.98 |
| SWPA252010S4R7MT | 4.7±20%    | 0.563         | 0.469 | 42                      | 0.95                             | 1.15 | 0.70                              | 0.76 |
| SWPA252010S5R6MT | 5.6±20%    | 0.563         | 0.469 | 35                      | 0.80                             | 0.95 | 0.73                              | 0.80 |
| SWPA252010S6R8MT | 6.8±20%    | 0.896         | 0.747 | 31                      | 0.78                             | 0.92 | 0.59                              | 0.64 |
| SWPA252010S100MT | 10±20%     | 1.092         | 0.910 | 27                      | 0.65                             | 0.78 | 0.50                              | 0.55 |

### SWPA252012S Series

| Part Number         | Inductance | DC Resistance |       | Self-resonant Frequency | Saturation Current <sup>*3</sup> |      | Heat Rating Current <sup>*4</sup> |      |
|---------------------|------------|---------------|-------|-------------------------|----------------------------------|------|-----------------------------------|------|
|                     | @100kHz,1V | Max.          | Typ.  | Min.                    | Max.                             | Typ. | Max.                              | Typ. |
| Units               | µH         | Ω             |       | MHz                     | A                                |      | A                                 |      |
| Symbol              | L          | DCR           |       | S.R.F                   | Isat                             |      | Irms                              |      |
| SWPA252012SR47NT    | 0.47±30%   | 0.061         | 0.047 | 160                     | 3.82                             | 4.27 | 2.15                              | 2.34 |
| SWPA252012SR68NT    | 0.68±30%   | 0.074         | 0.057 | 140                     | 3.28                             | 3.68 | 1.95                              | 2.13 |
| SWPA252012S1R0NT    | 1.0±30%    | 0.090         | 0.069 | 110                     | 2.59                             | 2.90 | 1.93                              | 2.10 |
| SWPA252012S1R2NT    | 1.2±30%    | 0.129         | 0.099 | 100                     | 2.38                             | 2.67 | 1.46                              | 1.59 |
| SWPA252012S1R5MT    | 1.5±20%    | 0.147         | 0.113 | 97                      | 2.24                             | 2.51 | 1.40                              | 1.53 |
| SWPA252012S1R5NTY01 | 1.5±30%    | 0.130         | 0.100 | 63                      | 1.80                             | 2.00 | 1.45                              | 1.58 |
| SWPA252012S2R2MT    | 2.2±20%    | 0.216         | 0.166 | 69                      | 1.85                             | 2.07 | 1.15                              | 1.25 |
| SWPA252012S2R2NTY02 | 2.2±30%    | 0.153         | 0.118 | 53                      | 1.55                             | 1.75 | 1.30                              | 1.42 |
| SWPA252012S2R7MT    | 2.7±20%    | 0.239         | 0.184 | 63                      | 1.72                             | 1.92 | 1.09                              | 1.19 |
| SWPA252012S3R3MT    | 3.3±20%    | 0.264         | 0.203 | 62                      | 1.61                             | 1.80 | 1.04                              | 1.13 |
| SWPA252012S3R6MT    | 3.6±20%    | 0.348         | 0.268 | 53                      | 1.46                             | 1.64 | 0.90                              | 0.98 |
| SWPA252012S4R3MT    | 4.3±20%    | 0.377         | 0.290 | 51                      | 1.37                             | 1.53 | 0.87                              | 0.95 |
| SWPA252012S4R7MT    | 4.7±20%    | 0.377         | 0.290 | 47                      | 1.12                             | 1.25 | 0.84                              | 0.92 |
| SWPA252012S5R1MT    | 5.1±20%    | 0.500         | 0.385 | 44                      | 1.23                             | 1.37 | 0.75                              | 0.82 |
| SWPA252012S5R6MT    | 5.6±20%    | 0.538         | 0.414 | 38                      | 1.11                             | 1.25 | 0.73                              | 0.80 |
| SWPA252012S6R2MT    | 6.2±20%    | 0.542         | 0.417 | 38                      | 1.03                             | 1.16 | 0.73                              | 0.80 |
| SWPA252012S6R8MT    | 6.8±20%    | 0.581         | 0.447 | 38                      | 0.98                             | 1.09 | 0.69                              | 0.75 |
| SWPA252012S7R5MT    | 7.5±20%    | 0.611         | 0.470 | 35                      | 0.97                             | 1.09 | 0.68                              | 0.74 |
| SWPA252012S8R2MT    | 8.2±20%    | 0.658         | 0.506 | 36                      | 0.98                             | 1.10 | 0.65                              | 0.71 |
| SWPA252012S9R1MT    | 9.1±20%    | 0.690         | 0.531 | 34                      | 0.91                             | 1.02 | 0.62                              | 0.68 |
| SWPA252012S100MT    | 10±20%     | 0.690         | 0.531 | 34                      | 0.79                             | 0.88 | 0.62                              | 0.68 |
| SWPA252012S120MT    | 12±20%     | 1.075         | 0.827 | 28                      | 0.78                             | 0.88 | 0.51                              | 0.56 |
| SWPA252012S150MT    | 15±20%     | 1.591         | 1.224 | 25                      | 0.68                             | 0.77 | 0.42                              | 0.46 |
| SWPA252012S220MT    | 22±20%     | 1.976         | 1.520 | 20                      | 0.53                             | 0.59 | 0.38                              | 0.41 |

# SPECIFICATIONS

## SWPA3010S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation Current<br>*3 |      | Heat Rating<br>Current<br>*4 |      |
|----------------|--------------------------|-------------------------|-------|------------------------------------|--------------------------|------|------------------------------|------|
|                |                          | Max.                    | Typ.  |                                    | Max.                     | Typ. | Max.                         | Typ. |
| Units          | µH                       | Ω                       |       | MHz                                | A                        |      | A                            |      |
| Symbol         | L                        | DCR                     |       | S.R.F                              | Isat                     |      | Irms                         |      |
| SWPA3010S1R0NT | 1.0±30%                  | 0.085                   | 0.065 | 180                                | 1.40                     | 2.10 | 1.45                         | 1.80 |
| SWPA3010S1R2NT | 1.2±30%                  | 0.085                   | 0.065 | 137                                | 1.25                     | 1.70 | 1.45                         | 1.80 |
| SWPA3010S1R5NT | 1.5±30%                  | 0.104                   | 0.080 | 120                                | 1.27                     | 1.70 | 1.30                         | 1.60 |
| SWPA3010S2R2NT | 2.2±30%                  | 0.143                   | 0.110 | 100                                | 1.15                     | 1.50 | 1.09                         | 1.40 |
| SWPA3010S2R7NT | 2.7±30%                  | 0.169                   | 0.130 | 90                                 | 1.00                     | 1.20 | 1.02                         | 1.40 |
| SWPA3010S3R3NT | 3.3±30%                  | 0.189                   | 0.145 | 74                                 | 0.97                     | 1.20 | 0.96                         | 1.20 |
| SWPA3010S3R6MT | 3.6±20%                  | 0.215                   | 0.165 | 67                                 | 0.95                     | 1.20 | 0.90                         | 1.10 |
| SWPA3010S4R7MT | 4.7±20%                  | 0.293                   | 0.225 | 59                                 | 0.75                     | 1.05 | 0.77                         | 1.10 |
| SWPA3010S5R6MT | 5.6±20%                  | 0.322                   | 0.248 | 40                                 | 0.58                     | 0.65 | 0.70                         | 1.05 |
| SWPA3010S6R8MT | 6.8±20%                  | 0.397                   | 0.305 | 42                                 | 0.55                     | 0.72 | 0.66                         | 0.96 |
| SWPA3010S8R2MT | 8.2±20%                  | 0.520                   | 0.400 | 23                                 | 0.55                     | 0.70 | 0.58                         | 0.70 |
| SWPA3010S100MT | 10±20%                   | 0.520                   | 0.400 | 39                                 | 0.55                     | 0.75 | 0.58                         | 0.70 |
| SWPA3010S120MT | 12±20%                   | 0.657                   | 0.505 | 36                                 | 0.43                     | 0.65 | 0.52                         | 0.67 |
| SWPA3010S150MT | 15±20%                   | 0.793                   | 0.610 | 30                                 | 0.42                     | 0.57 | 0.47                         | 0.57 |
| SWPA3010S220MT | 22±20%                   | 1.209                   | 0.930 | 28                                 | 0.35                     | 0.48 | 0.38                         | 0.52 |
| SWPA3010S270MT | 27±20%                   | 1.404                   | 1.080 | 25                                 | 0.30                     | 0.45 | 0.35                         | 0.50 |
| SWPA3010S330MT | 33±20%                   | 2.015                   | 1.550 | 18                                 | 0.29                     | 0.42 | 0.30                         | 0.55 |
| SWPA3010S390MT | 39±20%                   | 2.275                   | 1.750 | 18                                 | 0.28                     | 0.38 | 0.28                         | 0.53 |
| SWPA3010S430MT | 43±20%                   | 2.340                   | 1.800 | 18                                 | 0.23                     | 0.36 | 0.27                         | 0.52 |
| SWPA3010S470MT | 47±20%                   | 2.535                   | 1.950 | 18                                 | 0.22                     | 0.35 | 0.26                         | 0.52 |
| SWPA3010S510MT | 51±20%                   | 2.860                   | 2.200 | 18                                 | 0.21                     | 0.33 | 0.25                         | 0.48 |
| SWPA3010S560MT | 56±20%                   | 3.016                   | 2.320 | 16                                 | 0.21                     | 0.28 | 0.24                         | 0.35 |

## SWPA3012S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation Current<br>*3 |      | Heat Rating<br>Current<br>*4 |      |
|----------------|--------------------------|-------------------------|-------|------------------------------------|--------------------------|------|------------------------------|------|
|                |                          | Max.                    | Typ.  |                                    | Max.                     | Typ. | Max.                         | Typ. |
| Units          | µH                       | Ω                       |       | MHz                                | A                        |      | A                            |      |
| Symbol         | L                        | DCR                     |       | S.R.F                              | Isat                     |      | Irms                         |      |
| SWPA3012SR22NT | 0.22±30%                 | 0.022                   | 0.017 | 321                                | 5.30                     | 6.00 | 3.00                         | 3.30 |
| SWPA3012SR82NT | 0.82±30%                 | 0.039                   | 0.030 | 180                                | 2.05                     | 2.80 | 2.47                         | 3.00 |
| SWPA3012S1R0NT | 1.0±30%                  | 0.052                   | 0.040 | 120                                | 1.87                     | 2.80 | 2.20                         | 2.70 |
| SWPA3012S1R2NT | 1.2±30%                  | 0.059                   | 0.045 | 120                                | 2.22                     | 2.50 | 2.01                         | 2.20 |
| SWPA3012S1R5NT | 1.5±30%                  | 0.059                   | 0.045 | 110                                | 1.62                     | 1.90 | 2.01                         | 2.20 |
| SWPA3012S1R8NT | 1.8±30%                  | 0.082                   | 0.063 | 90                                 | 1.30                     | 1.90 | 1.65                         | 1.80 |
| SWPA3012S2R2NT | 2.2±30%                  | 0.098                   | 0.075 | 84                                 | 1.20                     | 1.90 | 1.55                         | 1.70 |
| SWPA3012S2R4NT | 2.4±30%                  | 0.088                   | 0.068 | 100                                | 1.15                     | 1.50 | 1.60                         | 1.70 |
| SWPA3012S2R7NT | 2.7±30%                  | 0.110                   | 0.085 | 65                                 | 1.14                     | 1.50 | 1.48                         | 1.50 |
| SWPA3012S3R3MT | 3.3±20%                  | 0.130                   | 0.100 | 64                                 | 1.05                     | 1.50 | 1.36                         | 1.40 |
| SWPA3012S3R6MT | 3.6±20%                  | 0.130                   | 0.100 | 36                                 | 1.05                     | 1.50 | 1.36                         | 1.40 |
| SWPA3012S3R9MT | 3.9±20%                  | 0.189                   | 0.145 | 61                                 | 1.00                     | 1.30 | 1.24                         | 1.30 |
| SWPA3012S4R7MT | 4.7±20%                  | 0.156                   | 0.120 | 61                                 | 0.90                     | 1.00 | 1.24                         | 1.30 |
| SWPA3012S5R6MT | 5.6±20%                  | 0.226                   | 0.174 | 61                                 | 0.80                     | 1.10 | 1.13                         | 1.24 |
| SWPA3012S6R8MT | 6.8±20%                  | 0.247                   | 0.190 | 61                                 | 0.75                     | 0.90 | 0.98                         | 1.10 |
| SWPA3012S100MT | 10±20%                   | 0.345                   | 0.265 | 42                                 | 0.60                     | 0.88 | 0.83                         | 0.90 |
| SWPA3012S120MT | 12±20%                   | 0.449                   | 0.345 | 32                                 | 0.48                     | 0.67 | 0.73                         | 0.84 |
| SWPA3012S150MT | 15±20%                   | 0.468                   | 0.360 | 27                                 | 0.45                     | 0.62 | 0.71                         | 0.77 |
| SWPA3012S180MT | 18±20%                   | 0.709                   | 0.545 | 25                                 | 0.43                     | 0.59 | 0.58                         | 0.65 |

## SPECIFICATIONS

### SWPA3012S Series

| Part Number    | Inductance | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation<br>Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|------------|-------------------------|-------|----------------------------|-------------------------------------|------|--------------------------------------|------|
|                | @100kHz,1V | Max.                    | Typ.  | Min.                       | Max.                                | Typ. | Max.                                 | Typ. |
| Units          | µH         | Ω                       |       | MHz                        | A                                   |      | A                                    |      |
| Symbol         | L          | DCR                     |       | S.R.F                      | Isat                                |      | Irms                                 |      |
| SWPA3012S220MT | 22±20%     | 0.839                   | 0.645 | 23                         | 0.42                                | 0.52 | 0.53                                 | 0.59 |
| SWPA3012S270MT | 27±20%     | 1.131                   | 0.870 | 21                         | 0.35                                | 0.48 | 0.47                                 | 0.51 |
| SWPA3012S330MT | 33±20%     | 1.138                   | 0.875 | 18                         | 0.36                                | 0.46 | 0.46                                 | 0.50 |
| SWPA3012S360MT | 36±20%     | 1.235                   | 0.950 | 18                         | 0.34                                | 0.44 | 0.44                                 | 0.48 |
| SWPA3012S390MT | 39±20%     | 1.729                   | 1.330 | 18                         | 0.30                                | 0.39 | 0.37                                 | 0.41 |
| SWPA3012S470MT | 47±20%     | 1.885                   | 1.450 | 14                         | 0.27                                | 0.35 | 0.35                                 | 0.40 |
| SWPA3012S560MT | 56±20%     | 1.794                   | 1.380 | 9                          | 0.26                                | 0.33 | 0.28                                 | 0.40 |
| SWPA3012S680MT | 68±20%     | 2.171                   | 1.670 | 7                          | 0.24                                | 0.29 | 0.33                                 | 0.37 |
| SWPA3012S820MT | 82±20%     | 3.302                   | 2.540 | 7                          | 0.17                                | 0.27 | 0.27                                 | 0.31 |
| SWPA3012S101MT | 100±20%    | 3.718                   | 2.860 | 5                          | 0.21                                | 0.23 | 0.25                                 | 0.29 |

### SWPA3015S Series

| Part Number    | Inductance | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|------------|-------------------------|-------|----------------------------|----------------------------------|------|--------------------------------------|------|
|                | @100kHz,1V | Max.                    | Typ.  | Min.                       | Max.                             | Typ. | Max.                                 | Typ. |
| Units          | µH         | Ω                       |       | MHz                        | A                                |      | A                                    |      |
| Symbol         | L          | DCR                     |       | S.R.F                      | Isat                             |      | Irms                                 |      |
| SWPA3015SR50NT | 0.5±30%    | 0.039                   | 0.030 | 162                        | 3.90                             | 4.20 | 2.60                                 | 2.80 |
| SWPA3015S1R0NT | 1.0±30%    | 0.039                   | 0.030 | 150                        | 2.32                             | 2.80 | 2.35                                 | 2.50 |
| SWPA3015S1R2NT | 1.2±30%    | 0.052                   | 0.040 | 110                        | 2.21                             | 3.10 | 1.95                                 | 2.30 |
| SWPA3015S1R5NT | 1.5±30%    | 0.065                   | 0.050 | 100                        | 2.30                             | 2.70 | 1.70                                 | 2.20 |
| SWPA3015S1R8NT | 1.8±30%    | 0.065                   | 0.050 | 92                         | 1.75                             | 2.20 | 1.70                                 | 2.20 |
| SWPA3015S2R2NT | 2.2±30%    | 0.078                   | 0.060 | 86                         | 1.60                             | 2.00 | 1.60                                 | 2.00 |
| SWPA3015S2R7NT | 2.7±30%    | 0.098                   | 0.075 | 64                         | 1.52                             | 1.90 | 1.43                                 | 1.90 |
| SWPA3015S3R3MT | 3.3±20%    | 0.104                   | 0.080 | 68                         | 1.32                             | 1.81 | 1.36                                 | 1.60 |
| SWPA3015S3R6MT | 3.6±20%    | 0.137                   | 0.105 | 59                         | 1.28                             | 1.60 | 1.20                                 | 1.50 |
| SWPA3015S3R9MT | 3.9±20%    | 0.137                   | 0.105 | 47                         | 1.20                             | 1.40 | 1.20                                 | 1.50 |
| SWPA3015S4R3MT | 4.3±20%    | 0.150                   | 0.115 | 53                         | 1.20                             | 1.40 | 1.14                                 | 1.30 |
| SWPA3015S4R7MT | 4.7±20%    | 0.163                   | 0.125 | 46                         | 1.10                             | 1.40 | 1.09                                 | 1.30 |
| SWPA3015S5R1MT | 5.1±20%    | 0.173                   | 0.133 | 49                         | 1.00                             | 1.20 | 1.05                                 | 1.20 |
| SWPA3015S6R2MT | 6.2±20%    | 0.254                   | 0.195 | 46                         | 1.00                             | 1.20 | 0.86                                 | 1.00 |
| SWPA3015S6R8MT | 6.8±20%    | 0.260                   | 0.200 | 39                         | 0.85                             | 1.10 | 0.85                                 | 1.10 |
| SWPA3015S100MT | 10±20%     | 0.325                   | 0.250 | 41                         | 0.72                             | 0.92 | 0.77                                 | 0.90 |
| SWPA3015S120MT | 12±20%     | 0.416                   | 0.320 | 32                         | 0.70                             | 0.90 | 0.68                                 | 0.89 |
| SWPA3015S150MT | 15±20%     | 0.455                   | 0.350 | 30                         | 0.66                             | 0.88 | 0.65                                 | 0.72 |
| SWPA3015S180MT | 18±20%     | 0.559                   | 0.430 | 23                         | 0.56                             | 0.72 | 0.59                                 | 0.72 |
| SWPA3015S220MT | 22±20%     | 0.598                   | 0.460 | 23                         | 0.52                             | 0.68 | 0.57                                 | 0.69 |
| SWPA3015S270MT | 27±20%     | 0.949                   | 0.730 | 22                         | 0.48                             | 0.56 | 0.45                                 | 0.56 |
| SWPA3015S330MT | 33±20%     | 1.066                   | 0.820 | 20                         | 0.44                             | 0.53 | 0.43                                 | 0.51 |
| SWPA3015S390MT | 39±20%     | 1.294                   | 0.995 | 14                         | 0.41                             | 0.55 | 0.39                                 | 0.44 |
| SWPA3015S430MT | 43±20%     | 1.378                   | 1.060 | 16                         | 0.37                             | 0.43 | 0.37                                 | 0.48 |
| SWPA3015S470MT | 47±20%     | 1.625                   | 1.250 | 14                         | 0.35                             | 0.43 | 0.35                                 | 0.44 |
| SWPA3015S560MT | 56±20%     | 1.664                   | 1.280 | 13                         | 0.33                             | 0.42 | 0.34                                 | 0.41 |
| SWPA3015S620MT | 62±20%     | 2.093                   | 1.610 | 13                         | 0.30                             | 0.40 | 0.30                                 | 0.41 |
| SWPA3015S680MT | 68±20%     | 3.510                   | 2.700 | 11                         | 0.28                             | 0.37 | 0.23                                 | 0.31 |
| SWPA3015S101MT | 100±20%    | 4.043                   | 3.110 | 6.3                        | 0.23                             | 0.25 | 0.21                                 | 0.25 |
| SWPA3015S151MT | 150±20%    | 4.940                   | 3.800 | 4.7                        | 0.18                             | 0.22 | 0.19                                 | 0.23 |

## SPECIFICATIONS

### SWPA4010S Series

| Part Number    | Inductance        | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation<br>Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|-------------------|-------------------------|-------|----------------------------|-------------------------------------|------|--------------------------------------|------|
|                |                   | Max.                    | Typ.  |                            | Min.                                | Max. | Typ.                                 | Max. |
| Units          | @100kHz, 1V<br>μH | Ω                       |       | MHz                        | A                                   |      | A                                    |      |
| Symbol         | L                 | DCR                     |       | S.R.F                      | Isat                                |      | Irms                                 |      |
| SWPA4010S1R0NT | 1.0±30%           | 0.067                   | 0.056 | 116                        | 2.00                                | 2.30 | 1.90                                 | 2.40 |
| SWPA4010S1R5NT | 1.5±30%           | 0.084                   | 0.070 | 94                         | 1.68                                | 2.00 | 1.70                                 | 2.00 |
| SWPA4010S2R2MT | 2.2±20%           | 0.102                   | 0.085 | 73                         | 1.20                                | 1.50 | 1.50                                 | 2.00 |
| SWPA4010S3R3MT | 3.3±20%           | 0.120                   | 0.100 | 58                         | 1.10                                | 1.40 | 1.40                                 | 1.80 |
| SWPA4010S4R7MT | 4.7±20%           | 0.168                   | 0.140 | 47                         | 0.95                                | 1.10 | 1.20                                 | 1.50 |
| SWPA4010S6R8MT | 6.8±20%           | 0.240                   | 0.200 | 38                         | 0.80                                | 0.95 | 1.00                                 | 1.20 |
| SWPA4010S100MT | 10±20%            | 0.360                   | 0.300 | 31                         | 0.62                                | 0.75 | 0.75                                 | 1.00 |
| SWPA4010S150MT | 15±20%            | 0.516                   | 0.430 | 24                         | 0.54                                | 0.61 | 0.60                                 | 0.85 |
| SWPA4010S220MT | 22±20%            | 0.684                   | 0.570 | 19                         | 0.45                                | 0.52 | 0.50                                 | 0.75 |

### SWPA4012S Series

| Part Number    | Inductance        | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation<br>Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|-------------------|-------------------------|-------|----------------------------|-------------------------------------|------|--------------------------------------|------|
|                |                   | Max.                    | Typ.  |                            | Min.                                | Max. | Typ.                                 | Max. |
| Units          | @100kHz, 1V<br>μH | Ω                       |       | MHz                        | A                                   |      | A                                    |      |
| Symbol         | L                 | DCR                     |       | S.R.F                      | Isat                                |      | Irms                                 |      |
| SWPA4012SR82NT | 0.82±30%          | 0.065                   | 0.050 | 150                        | 3.02                                | 3.30 | 1.65                                 | 2.50 |
| SWPA4012S1R0NT | 1.0±30%           | 0.065                   | 0.050 | 120                        | 2.61                                | 3.20 | 1.65                                 | 2.50 |
| SWPA4012S1R5NT | 1.5±30%           | 0.085                   | 0.065 | 90                         | 2.10                                | 2.70 | 1.46                                 | 2.20 |
| SWPA4012S1R8NT | 1.8±30%           | 0.104                   | 0.080 | 88                         | 2.12                                | 2.60 | 1.32                                 | 1.90 |
| SWPA4012S2R2NT | 2.2±30%           | 0.104                   | 0.080 | 74                         | 1.76                                | 2.30 | 1.32                                 | 1.90 |
| SWPA4012S2R7NT | 2.7±30%           | 0.117                   | 0.090 | 71                         | 1.90                                | 2.30 | 1.25                                 | 1.70 |
| SWPA4012S3R3NT | 3.3±30%           | 0.143                   | 0.110 | 60                         | 1.72                                | 2.10 | 1.12                                 | 1.60 |
| SWPA4012S3R6NT | 3.6±30%           | 0.143                   | 0.110 | 57                         | 1.20                                | 1.70 | 1.12                                 | 1.60 |
| SWPA4012S4R3NT | 4.3±30%           | 0.182                   | 0.140 | 54                         | 1.58                                | 1.70 | 1.00                                 | 1.50 |
| SWPA4012S4R7NT | 4.7±30%           | 0.163                   | 0.125 | 50                         | 1.15                                | 1.80 | 1.05                                 | 1.50 |
| SWPA4012S5R1NT | 5.1±30%           | 0.201                   | 0.155 | 50                         | 1.55                                | 1.60 | 0.95                                 | 1.50 |
| SWPA4012S5R6NT | 5.6±30%           | 0.182                   | 0.140 | 42                         | 1.00                                | 1.60 | 1.00                                 | 1.20 |
| SWPA4012S6R8MT | 6.8±20%           | 0.257                   | 0.198 | 40                         | 0.85                                | 1.40 | 0.84                                 | 1.20 |
| SWPA4012S100MT | 10±20%            | 0.345                   | 0.265 | 33                         | 0.80                                | 1.10 | 0.77                                 | 1.00 |
| SWPA4012S120MT | 12±20%            | 0.377                   | 0.290 | 32                         | 0.66                                | 1.00 | 0.70                                 | 0.95 |
| SWPA4012S150MT | 15±20%            | 0.442                   | 0.340 | 25                         | 0.56                                | 0.80 | 0.64                                 | 0.85 |
| SWPA4012S180MT | 18±20%            | 0.611                   | 0.470 | 23                         | 0.55                                | 0.75 | 0.55                                 | 0.80 |
| SWPA4012S220MT | 22±20%            | 0.763                   | 0.587 | 20                         | 0.46                                | 0.70 | 0.49                                 | 0.75 |
| SWPA4012S270MT | 27±20%            | 0.936                   | 0.720 | 18                         | 0.50                                | 0.70 | 0.45                                 | 0.60 |
| SWPA4012S330MT | 33±20%            | 1.053                   | 0.810 | 17                         | 0.42                                | 0.60 | 0.42                                 | 0.58 |
| SWPA4012S360MT | 36±20%            | 1.170                   | 0.900 | 14                         | 0.40                                | 0.50 | 0.40                                 | 0.56 |
| SWPA4012S390MT | 39±20%            | 1.430                   | 1.100 | 16                         | 0.55                                | 0.66 | 0.37                                 | 0.50 |
| SWPA4012S470MT | 47±20%            | 1.430                   | 1.100 | 12                         | 0.35                                | 0.50 | 0.37                                 | 0.50 |
| SWPA4012S560MT | 56±20%            | 1.625                   | 1.250 | 11                         | 0.33                                | 0.45 | 0.33                                 | 0.46 |
| SWPA4012S680MT | 68±20%            | 2.535                   | 1.950 | 11                         | 0.38                                | 0.45 | 0.27                                 | 0.45 |
| SWPA4012S820MT | 82±20%            | 2.782                   | 2.140 | 11                         | 0.28                                | 0.40 | 0.26                                 | 0.36 |
| SWPA4012S101MT | 100±20%           | 2.873                   | 2.210 | 9.4                        | 0.25                                | 0.30 | 0.25                                 | 0.35 |

## SPECIFICATIONS

### SWPA4018S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation<br>Current <sup>3</sup> |      | Heat Rating<br>Current <sup>4</sup> |      |
|----------------|--------------------------|-------------------------|-------|------------------------------------|------------------------------------|------|-------------------------------------|------|
|                |                          | Max.                    | Typ.  |                                    | Max.                               | Typ. | Max.                                | Typ. |
| Units          | µH                       | Ω                       |       | MHz                                | A                                  |      | A                                   |      |
| Symbol         | L                        | DCR                     |       | S.R.F                              | Isat                               |      | Irms                                |      |
| SWPA4018SR47NT | 0.47±30%                 | 0.018                   | 0.014 | 155                                | 4.30                               | 5.20 | 4.00                                | 4.50 |
| SWPA4018SR68NT | 0.68±30%                 | 0.026                   | 0.020 | 128                                | 4.90                               | 5.60 | 3.30                                | 3.80 |
| SWPA4018S1R0NT | 1.0±30%                  | 0.033                   | 0.025 | 80                                 | 4.80                               | 5.20 | 2.00                                | 3.30 |
| SWPA4018S1R5NT | 1.5±30%                  | 0.039                   | 0.030 | 65                                 | 3.35                               | 4.00 | 1.80                                | 3.20 |
| SWPA4018S1R8NT | 1.8±30%                  | 0.044                   | 0.034 | 54                                 | 3.00                               | 3.40 | 2.00                                | 2.80 |
| SWPA4018S2R2MT | 2.2±20%                  | 0.059                   | 0.045 | 52                                 | 2.70                               | 3.20 | 1.65                                | 2.60 |
| SWPA4018S3R3MT | 3.3±20%                  | 0.091                   | 0.070 | 44                                 | 2.45                               | 2.90 | 1.23                                | 2.10 |
| SWPA4018S4R7MT | 4.7±20%                  | 0.117                   | 0.090 | 34                                 | 1.70                               | 2.20 | 1.20                                | 1.80 |
| SWPA4018S6R8MT | 6.8±20%                  | 0.143                   | 0.110 | 29                                 | 1.45                               | 2.00 | 1.06                                | 1.50 |
| SWPA4018S100MT | 10±20%                   | 0.234                   | 0.180 | 24                                 | 1.30                               | 1.60 | 0.84                                | 1.20 |
| SWPA4018S150MT | 15±20%                   | 0.325                   | 0.250 | 19                                 | 0.94                               | 1.10 | 0.65                                | 1.00 |
| SWPA4018S220MT | 22±20%                   | 0.468                   | 0.360 | 16                                 | 0.80                               | 0.88 | 0.59                                | 0.85 |
| SWPA4018S270MT | 27±20%                   | 0.611                   | 0.470 | 27                                 | 0.47                               | 0.62 | 0.52                                | 0.90 |
| SWPA4018S330MT | 33±20%                   | 0.689                   | 0.530 | 12                                 | 0.56                               | 0.75 | 0.49                                | 0.72 |
| SWPA4018S470MT | 47±20%                   | 0.845                   | 0.650 | 10                                 | 0.57                               | 0.70 | 0.42                                | 0.65 |
| SWPA4018S680MT | 68±20%                   | 1.300                   | 1.000 | 8.3                                | 0.47                               | 0.51 | 0.32                                | 0.52 |
| SWPA4018S101MT | 100±20%                  | 2.275                   | 1.750 | 6.5                                | 0.40                               | 0.44 | 0.25                                | 0.41 |
| SWPA4018S151MT | 150±20%                  | 3.250                   | 2.500 | 5.5                                | 0.31                               | 0.34 | 0.22                                | 0.36 |
| SWPA4018S221MT | 220±20%                  | 5.200                   | 4.000 | 4                                  | 0.27                               | 0.30 | 0.17                                | 0.27 |

### SWPA4020S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation<br>Current <sup>3</sup> |      | Heat Rating<br>Current <sup>4</sup> |      |
|----------------|--------------------------|-------------------------|-------|------------------------------------|------------------------------------|------|-------------------------------------|------|
|                |                          | Max.                    | Typ.  |                                    | Max.                               | Typ. | Max.                                | Typ. |
| Units          | µH                       | Ω                       |       | MHz                                | A                                  |      | A                                   |      |
| Symbol         | L                        | DCR                     |       | S.R.F                              | Isat                               |      | Irms                                |      |
| SWPA4020SR24MT | 0.24±20%                 | 0.014                   | 0.011 | 283                                | 10.5                               | 12.5 | 4.50                                | 5.20 |
| SWPA4020SR33NT | 0.33±30%                 | 0.016                   | 0.013 | 223                                | 7.50                               | 8.50 | 3.30                                | 4.90 |
| SWPA4020SR47NT | 0.47±30%                 | 0.029                   | 0.022 | 160                                | 7.00                               | 7.50 | 3.30                                | 3.70 |
| SWPA4020SR68NT | 0.68±30%                 | 0.036                   | 0.028 | 120                                | 6.40                               | 6.60 | 2.80                                | 3.30 |
| SWPA4020S1R0NT | 1.0±30%                  | 0.038                   | 0.029 | 75                                 | 4.78                               | 5.20 | 2.15                                | 3.20 |
| SWPA4020S1R2NT | 1.2±30%                  | 0.038                   | 0.029 | 72                                 | 5.10                               | 5.60 | 2.15                                | 3.20 |
| SWPA4020S1R5NT | 1.5±30%                  | 0.046                   | 0.035 | 71                                 | 4.45                               | 4.90 | 1.98                                | 3.00 |
| SWPA4020S2R2NT | 2.2±30%                  | 0.052                   | 0.040 | 49                                 | 3.40                               | 3.70 | 1.85                                | 2.80 |
| SWPA4020S3R3MT | 3.3±20%                  | 0.091                   | 0.070 | 44                                 | 3.20                               | 3.50 | 1.40                                | 2.50 |
| SWPA4020S3R6MT | 3.6±20%                  | 0.072                   | 0.055 | 49                                 | 2.80                               | 3.00 | 1.54                                | 2.50 |
| SWPA4020S4R7MT | 4.7±20%                  | 0.098                   | 0.075 | 42                                 | 2.35                               | 2.50 | 1.34                                | 2.00 |
| SWPA4020S5R1MT | 5.1±20%                  | 0.111                   | 0.085 | 42                                 | 2.30                               | 2.50 | 1.27                                | 1.80 |
| SWPA4020S5R6MT | 5.6±20%                  | 0.117                   | 0.090 | 30                                 | 2.20                               | 2.40 | 1.22                                | 1.80 |
| SWPA4020S6R2MT | 6.2±20%                  | 0.150                   | 0.115 | 36                                 | 2.15                               | 2.30 | 1.08                                | 1.60 |
| SWPA4020S6R8MT | 6.8±20%                  | 0.163                   | 0.125 | 33                                 | 2.20                               | 2.40 | 1.04                                | 1.60 |
| SWPA4020S7R5MT | 7.5±20%                  | 0.150                   | 0.115 | 30                                 | 1.85                               | 2.00 | 1.08                                | 1.50 |
| SWPA4020S8R2MT | 8.2±20%                  | 0.163                   | 0.125 | 27                                 | 1.75                               | 1.90 | 1.04                                | 1.40 |
| SWPA4020S100MT | 10±20%                   | 0.215                   | 0.165 | 26                                 | 1.60                               | 1.70 | 0.90                                | 1.20 |
| SWPA4020S120MT | 12±20%                   | 0.228                   | 0.175 | 26                                 | 1.50                               | 1.60 | 0.88                                | 1.20 |
| SWPA4020S150MT | 15±20%                   | 0.299                   | 0.230 | 24                                 | 1.35                               | 1.50 | 0.77                                | 1.10 |
| SWPA4020S220MT | 22±20%                   | 0.455                   | 0.350 | 15                                 | 1.05                               | 1.10 | 0.62                                | 0.87 |
| SWPA4020S270MT | 27±20%                   | 0.709                   | 0.545 | 14                                 | 1.02                               | 1.10 | 0.50                                | 0.70 |

## SPECIFICATIONS

### SWPA4020S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation Current<br>*3 |      | Heat Rating<br>Current<br>*4 |      |
|----------------|--------------------------|-------------------------|-------|------------------------------------|--------------------------|------|------------------------------|------|
|                |                          | Max.                    | Typ.  |                                    | Max.                     | Typ. | Max.                         | Typ. |
| Units          | μH                       | Ω                       |       | MHz                                | A                        |      | A                            |      |
| Symbol         | L                        | DCR                     |       | S.R.F                              | Isat                     |      | Irms                         |      |
| SWPA4020S330MT | 33±20%                   | 0.715                   | 0.550 | 11                                 | 0.85                     | 0.93 | 0.49                         | 0.68 |
| SWPA4020S390MT | 39±20%                   | 0.845                   | 0.650 | 11                                 | 0.82                     | 0.90 | 0.46                         | 0.64 |
| SWPA4020S430MT | 43±20%                   | 0.858                   | 0.660 | 10                                 | 0.77                     | 0.85 | 0.45                         | 0.63 |
| SWPA4020S470MT | 47±20%                   | 0.923                   | 0.710 | 10                                 | 0.74                     | 0.81 | 0.44                         | 0.61 |
| SWPA4020S510MT | 51±20%                   | 0.975                   | 0.750 | 10                                 | 0.70                     | 0.77 | 0.42                         | 0.59 |
| SWPA4020S560MT | 56±20%                   | 1.040                   | 0.800 | 10                                 | 0.66                     | 0.72 | 0.41                         | 0.57 |
| SWPA4020S620MT | 62±20%                   | 1.170                   | 0.900 | 9.6                                | 0.65                     | 0.71 | 0.39                         | 0.52 |
| SWPA4020S680MT | 68±20%                   | 1.380                   | 1.060 | 7.7                                | 0.61                     | 0.67 | 0.36                         | 0.50 |
| SWPA4020S750MT | 75±20%                   | 1.510                   | 1.160 | 7.7                                | 0.70                     | 0.77 | 0.35                         | 0.49 |
| SWPA4020S820MT | 82±20%                   | 1.520                   | 1.170 | 7.2                                | 0.50                     | 0.55 | 0.34                         | 0.47 |
| SWPA4020S101MT | 100±20%                  | 2.020                   | 1.550 | 6.3                                | 0.48                     | 0.53 | 0.31                         | 0.43 |

### SWPA4026S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation Current<br>*3 |      | Heat Rating<br>Current<br>*4 |      |
|----------------|--------------------------|-------------------------|-------|------------------------------------|--------------------------|------|------------------------------|------|
|                |                          | Max.                    | Typ.  |                                    | Max.                     | Typ. | Max.                         | Typ. |
| Units          | μH                       | Ω                       |       | MHz                                | A                        |      | A                            |      |
| Symbol         | L                        | DCR                     |       | S.R.F                              | Isat                     |      | Irms                         |      |
| SWPA4026S1R0NT | 1.0±30%                  | 0.031                   | 0.024 | 151                                | 3.30                     | 3.80 | 3.00                         | 3.30 |
| SWPA4026S1R2NT | 1.2±30%                  | 0.039                   | 0.030 | 120                                | 3.10                     | 3.40 | 2.30                         | 3.30 |
| SWPA4026S1R5NT | 1.5±30%                  | 0.039                   | 0.030 | 100                                | 2.40                     | 2.90 | 2.30                         | 3.10 |
| SWPA4026S2R2MT | 2.2±20%                  | 0.052                   | 0.040 | 96                                 | 2.10                     | 2.40 | 2.00                         | 3.80 |
| SWPA4026S3R3MT | 3.3±20%                  | 0.065                   | 0.050 | 58                                 | 1.80                     | 2.00 | 1.70                         | 2.50 |
| SWPA4026S4R7MT | 4.7±20%                  | 0.072                   | 0.055 | 46                                 | 1.45                     | 1.70 | 1.60                         | 2.30 |
| SWPA4026S6R8MT | 6.8±20%                  | 0.085                   | 0.065 | 33                                 | 1.30                     | 1.50 | 1.50                         | 2.00 |
| SWPA4026S100MT | 10±20%                   | 0.110                   | 0.085 | 26                                 | 1.00                     | 1.20 | 1.30                         | 1.90 |
| SWPA4026S150MT | 15±20%                   | 0.143                   | 0.110 | 19                                 | 0.90                     | 1.00 | 1.10                         | 1.50 |
| SWPA4026S220MT | 22±20%                   | 0.214                   | 0.165 | 13                                 | 0.60                     | 0.80 | 0.90                         | 1.40 |
| SWPA4026S330MT | 33±20%                   | 0.351                   | 0.270 | 9                                  | 0.55                     | 0.65 | 0.70                         | 1.00 |
| SWPA4026S470MT | 47±20%                   | 0.390                   | 0.300 | 6                                  | 0.40                     | 0.55 | 0.65                         | 0.90 |

### SWPA4030S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation<br>Current*3 |      | Heat Rating<br>Current*4 |      |
|----------------|--------------------------|-------------------------|-------|------------------------------------|-------------------------|------|--------------------------|------|
|                |                          | Max.                    | Typ.  |                                    | Max.                    | Typ. | Max.                     | Typ. |
| Units          | μH                       | Ω                       |       | MHz                                | A                       |      | A                        |      |
| Symbol         | L                        | DCR                     |       | S.R.F                              | Isat                    |      | Irms                     |      |
| SWPA4030SR68NT | 0.68±30%                 | 0.013                   | 0.010 | 130                                | 6.80                    | 8.00 | 4.56                     | 5.10 |
| SWPA4030SR91NT | 0.91±30%                 | 0.017                   | 0.013 | 100                                | 6.25                    | 6.80 | 4.15                     | 4.70 |
| SWPA4030S1R0NT | 1.0±30%                  | 0.018                   | 0.014 | 70                                 | 5.26                    | 5.70 | 4.15                     | 4.70 |
| SWPA4030S1R2NT | 1.2±30%                  | 0.020                   | 0.015 | 80                                 | 5.80                    | 6.30 | 3.82                     | 4.20 |
| SWPA4030S1R5NT | 1.5±30%                  | 0.026                   | 0.020 | 62                                 | 4.84                    | 5.30 | 3.34                     | 3.60 |
| SWPA4030S1R8NT | 1.8±30%                  | 0.033                   | 0.025 | 60                                 | 5.40                    | 5.00 | 3.20                     | 3.30 |
| SWPA4030S2R2NT | 2.2±30%                  | 0.039                   | 0.030 | 52                                 | 4.90                    | 5.80 | 2.95                     | 3.20 |
| SWPA4030S3R3MT | 3.3±20%                  | 0.052                   | 0.040 | 38                                 | 3.30                    | 3.60 | 2.40                     | 2.60 |
| SWPA4030S3R6MT | 3.6±20%                  | 0.052                   | 0.040 | 37                                 | 3.00                    | 3.50 | 2.40                     | 2.60 |
| SWPA4030S3R9MT | 3.9±20%                  | 0.074                   | 0.057 | 32                                 | 3.00                    | 3.30 | 2.10                     | 2.30 |



# SPECIFICATIONS

## SWPA4030S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation<br>Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|--------------------------|-------------------------|-------|------------------------------------|-------------------------------------|------|--------------------------------------|------|
|                |                          | Max.                    | Typ.  |                                    | Max.                                | Typ. | Max.                                 | Typ. |
| Units          | µH                       | Ω                       |       | MHz                                | A                                   |      | A                                    |      |
| Symbol         | L                        | DCR                     |       | S.R.F                              | Isat                                |      | Irms                                 |      |
| SWPA4030S4R3MT | 4.3±20%                  | 0.072                   | 0.055 | 37                                 | 2.95                                | 3.20 | 2.10                                 | 2.30 |
| SWPA4030S4R7MT | 4.7±20%                  | 0.078                   | 0.060 | 31                                 | 2.90                                | 3.20 | 2.00                                 | 2.30 |
| SWPA4030S5R6MT | 5.6±20%                  | 0.085                   | 0.065 | 30                                 | 2.60                                | 2.80 | 1.95                                 | 2.10 |
| SWPA4030S6R8MT | 6.8±20%                  | 0.117                   | 0.090 | 24                                 | 2.75                                | 3.00 | 1.60                                 | 1.70 |
| SWPA4030S7R5MT | 7.5±20%                  | 0.110                   | 0.085 | 26                                 | 2.20                                | 2.40 | 1.65                                 | 1.80 |
| SWPA4030S8R2MT | 8.2±20%                  | 0.117                   | 0.090 | 26                                 | 2.10                                | 2.30 | 1.60                                 | 1.70 |
| SWPA4030S100MT | 10±20%                   | 0.130                   | 0.100 | 21                                 | 1.95                                | 2.40 | 1.50                                 | 1.60 |
| SWPA4030S120MT | 12±20%                   | 0.175                   | 0.135 | 18                                 | 1.70                                | 1.80 | 1.30                                 | 1.40 |
| SWPA4030S150MT | 15±20%                   | 0.247                   | 0.190 | 16                                 | 1.65                                | 1.80 | 1.11                                 | 1.20 |
| SWPA4030S180MT | 18±20%                   | 0.260                   | 0.200 | 10                                 | 1.40                                | 1.50 | 1.10                                 | 1.20 |
| SWPA4030S220MT | 22±20%                   | 0.292                   | 0.225 | 10                                 | 1.30                                | 1.40 | 1.00                                 | 1.20 |
| SWPA4030S270MT | 27±20%                   | 0.338                   | 0.260 | 10                                 | 1.15                                | 1.35 | 0.90                                 | 1.05 |
| SWPA4030S330MT | 33±20%                   | 0.429                   | 0.330 | 10                                 | 1.10                                | 1.20 | 0.84                                 | 0.92 |
| SWPA4030S360MT | 36±20%                   | 0.436                   | 0.335 | 9.8                                | 1.05                                | 1.10 | 0.83                                 | 0.91 |
| SWPA4030S390MT | 39±20%                   | 0.566                   | 0.435 | 10                                 | 1.03                                | 1.10 | 0.73                                 | 0.80 |
| SWPA4030S470MT | 47±20%                   | 0.579                   | 0.445 | 8.4                                | 0.95                                | 1.00 | 0.72                                 | 0.80 |
| SWPA4030S510MT | 51±20%                   | 0.611                   | 0.470 | 8.4                                | 0.90                                | 1.13 | 0.70                                 | 0.80 |
| SWPA4030S560MT | 56±20%                   | 0.722                   | 0.555 | 8.4                                | 0.85                                | 0.94 | 0.65                                 | 0.71 |
| SWPA4030S620MT | 62±20%                   | 0.761                   | 0.585 | 7                                  | 0.80                                | 0.99 | 0.63                                 | 0.70 |
| SWPA4030S680MT | 68±20%                   | 1.128                   | 0.868 | 7                                  | 0.72                                | 0.80 | 0.52                                 | 0.57 |
| SWPA4030S750MT | 75±20%                   | 1.326                   | 1.020 | 6.3                                | 0.70                                | 0.88 | 0.48                                 | 0.53 |
| SWPA4030S820MT | 82±20%                   | 1.378                   | 1.060 | 5.6                                | 0.66                                | 0.72 | 0.47                                 | 0.52 |
| SWPA4030S910MT | 91±20%                   | 1.430                   | 1.100 | 5.6                                | 0.65                                | 0.71 | 0.46                                 | 0.50 |
| SWPA4030S101MT | 100±20%                  | 1.495                   | 1.150 | 5.6                                | 0.60                                | 0.73 | 0.45                                 | 0.49 |
| SWPA4030S121MT | 120±20%                  | 1.755                   | 1.350 | 5.4                                | 0.55                                | 0.60 | 0.42                                 | 0.46 |
| SWPA4030S151MT | 150±20%                  | 2.340                   | 1.800 | 4                                  | 0.50                                | 0.60 | 0.30                                 | 0.41 |
| SWPA4030S221MT | 220±20%                  | 3.250                   | 2.500 | 4.2                                | 0.40                                | 0.50 | 0.35                                 | 0.40 |
| SWPA4030S331MT | 330±20%                  | 5.200                   | 4.000 | 6.8                                | 0.30                                | 0.40 | 0.25                                 | 0.26 |
| SWPA4030S471KT | 470±10%                  | 9.360                   | 7.200 | 2                                  | 0.30                                | 0.35 | 0.20                                 | 0.21 |
| SWPA4030S501MT | 500±20%                  | 9.027                   | 6.944 | 2                                  | 0.28                                | 0.30 | 0.15                                 | 0.20 |
| SWPA4030S681MT | 680±20%                  | 9.854                   | 7.580 | 1.2                                | 0.19                                | 0.23 | 0.14                                 | 0.19 |

## SWPA5012S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|--------------------------|-------------------------|-------|------------------------------------|----------------------------------|------|--------------------------------------|------|
|                |                          | Max.                    | Typ.  |                                    | Max.                             | Typ. | Max.                                 | Typ. |
| Units          | µH                       | Ω                       |       | MHz                                | A                                |      | A                                    |      |
| Symbol         | L                        | DCR                     |       | S.R.F                              | Isat                             |      | Irms                                 |      |
| SWPA5012SR22NT | 0.22±30%                 | 0.034                   | 0.028 | 315                                | 8.10                             | 9.30 | 3.00                                 | 3.30 |
| SWPA5012S1R0NT | 1.0±30%                  | 0.068                   | 0.057 | 103                                | 4.40                             | 4.70 | 2.00                                 | 2.40 |
| SWPA5012S1R5NT | 1.5±30%                  | 0.086                   | 0.072 | 68                                 | 3.70                             | 3.80 | 1.90                                 | 2.20 |
| SWPA5012S2R2NT | 2.2±30%                  | 0.108                   | 0.090 | 50                                 | 3.10                             | 3.20 | 1.70                                 | 2.00 |
| SWPA5012S3R3NT | 3.3±30%                  | 0.151                   | 0.126 | 34                                 | 2.40                             | 2.60 | 1.40                                 | 1.70 |
| SWPA5012S4R7NT | 4.7±30%                  | 0.197                   | 0.164 | 31                                 | 2.20                             | 2.30 | 1.30                                 | 1.50 |
| SWPA5012S6R8MT | 6.8±20%                  | 0.294                   | 0.245 | 22                                 | 1.70                             | 1.90 | 1.00                                 | 1.20 |
| SWPA5012S100MT | 10±20%                   | 0.413                   | 0.344 | 17                                 | 1.40                             | 1.50 | 0.85                                 | 1.00 |
| SWPA5012S150MT | 15±20%                   | 0.523                   | 0.436 | 13                                 | 1.20                             | 1.30 | 0.80                                 | 0.92 |

## SPECIFICATIONS

### SWPA5012S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation Current<br>*3 |      | Heat Rating<br>Current<br>*4 |      |
|----------------|--------------------------|-------------------------|-------|------------------------------------|--------------------------|------|------------------------------|------|
|                |                          | Max.                    | Typ.  |                                    | Max.                     | Typ. | Max.                         | Typ. |
| Units          | µH                       | Ω                       |       | MHz                                | A                        |      | A                            |      |
| Symbol         | L                        | DCR                     |       | S.R.F                              | Isat                     |      | Irms                         |      |
| SWPA5012S220MT | 22±20%                   | 0.858                   | 0.780 | 16                                 | 0.88                     | 0.98 | 0.60                         | 0.68 |

### SWPA5020S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation Current<br>*3 |       | Heat Rating<br>Current<br>*4 |      |
|----------------|--------------------------|-------------------------|-------|------------------------------------|--------------------------|-------|------------------------------|------|
|                |                          | Max.                    | Typ.  |                                    | Max.                     | Typ.  | Max.                         | Typ. |
| Units          | µH                       | Ω                       |       | MHz                                | A                        |       | A                            |      |
| Symbol         | L                        | DCR                     |       | S.R.F                              | Isat                     |       | Irms                         |      |
| SWPA5020SR22NT | 0.22±30%                 | 0.011                   | 0.009 | 280                                | 9.00                     | 12.00 | 5.30                         | 6.00 |
| SWPA5020SR24NT | 0.24±30%                 | 0.011                   | 0.009 | 248                                | 8.00                     | 10.00 | 5.30                         | 6.00 |
| SWPA5020SR47NT | 0.47±30%                 | 0.017                   | 0.013 | 160                                | 6.15                     | 6.70  | 4.60                         | 5.00 |
| SWPA5020SR56NT | 0.56±30%                 | 0.022                   | 0.017 | 137                                | 8.50                     | 9.60  | 3.80                         | 4.20 |
| SWPA5020SR68MT | 0.68±30%                 | 0.022                   | 0.017 | 120                                | 5.50                     | 6.00  | 4.00                         | 4.40 |
| SWPA5020SR75NT | 0.75±30%                 | 0.022                   | 0.017 | 117                                | 5.50                     | 6.00  | 4.00                         | 4.40 |
| SWPA5020S1R0NT | 1.0±30%                  | 0.026                   | 0.020 | 114                                | 4.10                     | 5.00  | 3.80                         | 4.10 |
| SWPA5020S1R2NT | 1.2±30%                  | 0.029                   | 0.022 | 83                                 | 4.50                     | 4.90  | 3.55                         | 3.90 |
| SWPA5020S1R5NT | 1.5±30%                  | 0.034                   | 0.026 | 68                                 | 4.10                     | 4.50  | 3.20                         | 3.50 |
| SWPA5020S2R2NT | 2.2±30%                  | 0.042                   | 0.032 | 57                                 | 3.20                     | 4.00  | 2.90                         | 3.10 |
| SWPA5020S2R7NT | 2.7±30%                  | 0.049                   | 0.038 | 52                                 | 2.90                     | 3.50  | 2.70                         | 2.90 |
| SWPA5020S3R0NT | 3.0±30%                  | 0.049                   | 0.038 | 49                                 | 2.55                     | 2.80  | 2.70                         | 2.90 |
| SWPA5020S3R3NT | 3.3±30%                  | 0.056                   | 0.043 | 46                                 | 2.55                     | 3.00  | 2.50                         | 2.70 |
| SWPA5020S3R6NT | 3.6±30%                  | 0.056                   | 0.043 | 43                                 | 2.80                     | 3.00  | 2.50                         | 2.70 |
| SWPA5020S3R9NT | 3.9±30%                  | 0.056                   | 0.043 | 40                                 | 2.30                     | 2.80  | 2.50                         | 2.70 |
| SWPA5020S4R3MT | 4.3±20%                  | 0.074                   | 0.057 | 37                                 | 2.50                     | 3.00  | 2.20                         | 2.40 |
| SWPA5020S4R7MT | 4.7±20%                  | 0.074                   | 0.057 | 37                                 | 2.50                     | 2.70  | 2.20                         | 2.40 |
| SWPA5020S5R1MT | 5.1±20%                  | 0.083                   | 0.064 | 32                                 | 2.25                     | 2.60  | 2.05                         | 2.20 |
| SWPA5020S5R6MT | 5.6±20%                  | 0.083                   | 0.064 | 32                                 | 2.30                     | 2.50  | 2.05                         | 2.20 |
| SWPA5020S6R8MT | 6.8±20%                  | 0.108                   | 0.083 | 30                                 | 2.05                     | 2.20  | 1.80                         | 1.90 |
| SWPA5020S7R5MT | 7.5±20%                  | 0.117                   | 0.090 | 26                                 | 1.85                     | 2.00  | 1.75                         | 1.90 |
| SWPA5020S8R2MT | 8.2±20%                  | 0.127                   | 0.098 | 26                                 | 1.85                     | 2.00  | 1.65                         | 1.80 |
| SWPA5020S9R1MT | 9.1±20%                  | 0.143                   | 0.110 | 24                                 | 1.70                     | 1.80  | 1.55                         | 1.70 |
| SWPA5020S100MT | 10±20%                   | 0.143                   | 0.110 | 24                                 | 1.70                     | 1.80  | 1.55                         | 1.70 |
| SWPA5020S120MT | 12±20%                   | 0.182                   | 0.140 | 22                                 | 1.50                     | 1.60  | 1.40                         | 1.50 |
| SWPA5020S150MT | 15±20%                   | 0.215                   | 0.165 | 20                                 | 1.35                     | 1.40  | 1.25                         | 1.30 |
| SWPA5020S180MT | 18±20%                   | 0.260                   | 0.200 | 16                                 | 1.25                     | 1.30  | 1.15                         | 1.20 |
| SWPA5020S220MT | 22±20%                   | 0.294                   | 0.226 | 14                                 | 1.15                     | 1.20  | 1.10                         | 1.20 |
| SWPA5020S330MT | 33±20%                   | 0.507                   | 0.390 | 10                                 | 0.92                     | 1.00  | 0.90                         | 0.99 |
| SWPA5020S470MT | 47±20%                   | 0.680                   | 0.523 | 7                                  | 0.77                     | 0.84  | 0.77                         | 0.84 |
| SWPA5020S560MT | 56±20%                   | 0.819                   | 0.630 | 6                                  | 0.77                     | 0.84  | 0.70                         | 0.77 |
| SWPA5020S680MT | 68±20%                   | 0.962                   | 0.740 | 6                                  | 0.65                     | 0.70  | 0.64                         | 0.70 |
| SWPA5020S820MT | 82±20%                   | 1.158                   | 0.965 | 6                                  | 0.65                     | 0.75  | 0.50                         | 0.60 |
| SWPA5020S101MT | 100±20%                  | 1.430                   | 1.100 | 6                                  | 0.53                     | 0.58  | 0.53                         | 0.58 |
| SWPA5020S121MT | 120±20%                  | 1.755                   | 1.350 | 6                                  | 0.42                     | 0.53  | 0.40                         | 0.50 |
| SWPA5020S201MT | 200±20%                  | 2.600                   | 2.000 | 4.5                                | 0.30                     | 0.33  | 0.40                         | 0.45 |

## SPECIFICATIONS

### SWPA5040S Series

| Part Number    | Inductance | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation<br>Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|------------|-------------------------|-------|----------------------------|-------------------------------------|------|--------------------------------------|------|
|                | @100kHz,1V | Max.                    | Typ.  | Min.                       | Max.                                | Typ. | Max.                                 | Typ. |
| Units          | µH         | Ω                       |       | MHz                        | A                                   |      | A                                    |      |
| Symbol         | L          | DCR                     |       | S.R.F                      | Isat                                |      | Irms                                 |      |
| SWPA5040S1R0NT | 1.0±30%    | 0.016                   | 0.012 | 117                        | 7.35                                | 8.00 | 4.90                                 | 5.00 |
| SWPA5040S1R2NT | 1.2±30%    | 0.021                   | 0.016 | 110                        | 6.50                                | 7.00 | 4.15                                 | 4.25 |
| SWPA5040S1R5NT | 1.5±30%    | 0.020                   | 0.015 | 86                         | 6.30                                | 6.80 | 4.30                                 | 4.85 |
| SWPA5040S1R8MT | 1.8±20%    | 0.021                   | 0.016 | 55                         | 5.50                                | 6.05 | 4.15                                 | 4.30 |
| SWPA5040S2R2NT | 2.2±30%    | 0.025                   | 0.019 | 50                         | 4.90                                | 5.50 | 3.80                                 | 4.20 |
| SWPA5040S2R7NT | 2.7±30%    | 0.029                   | 0.022 | 37                         | 4.30                                | 4.80 | 3.60                                 | 4.00 |
| SWPA5040S3R0NT | 3.0±30%    | 0.029                   | 0.022 | 37                         | 4.15                                | 4.60 | 3.60                                 | 4.00 |
| SWPA5040S3R3NT | 3.3±30%    | 0.031                   | 0.024 | 32                         | 3.95                                | 4.45 | 3.40                                 | 3.90 |
| SWPA5040S3R6MT | 3.6±20%    | 0.034                   | 0.026 | 30                         | 3.80                                | 4.40 | 3.30                                 | 3.70 |
| SWPA5040S3R9NT | 3.9±30%    | 0.035                   | 0.027 | 29                         | 3.55                                | 4.00 | 3.20                                 | 3.70 |
| SWPA5040S4R7NT | 4.7±30%    | 0.039                   | 0.030 | 28                         | 3.50                                | 3.80 | 3.00                                 | 3.30 |
| SWPA5040S5R6MT | 5.6±20%    | 0.046                   | 0.035 | 27                         | 3.00                                | 3.70 | 2.80                                 | 3.10 |
| SWPA5040S6R8MT | 6.8±20%    | 0.056                   | 0.043 | 21                         | 2.90                                | 3.40 | 2.50                                 | 2.80 |
| SWPA5040S8R2MT | 8.2±20%    | 0.062                   | 0.048 | 20                         | 2.70                                | 2.90 | 2.30                                 | 2.60 |
| SWPA5040S100MT | 10±20%     | 0.083                   | 0.064 | 18                         | 2.35                                | 2.70 | 2.10                                 | 2.35 |
| SWPA5040S150MT | 15±20%     | 0.112                   | 0.086 | 13                         | 2.00                                | 2.20 | 2.00                                 | 2.05 |
| SWPA5040S220MT | 22±20%     | 0.168                   | 0.129 | 11                         | 1.60                                | 1.80 | 1.50                                 | 1.60 |
| SWPA5040S330MT | 33±20%     | 0.244                   | 0.188 | 9                          | 1.30                                | 1.45 | 1.20                                 | 1.35 |
| SWPA5040S470MT | 47±20%     | 0.354                   | 0.272 | 7                          | 1.10                                | 1.20 | 1.00                                 | 1.15 |
| SWPA5040S680MT | 68±20%     | 0.520                   | 0.400 | 6                          | 0.90                                | 1.00 | 0.80                                 | 0.90 |
| SWPA5040S101MT | 100±20%    | 0.728                   | 0.560 | 5                          | 0.75                                | 0.85 | 0.70                                 | 0.78 |
| SWPA5040S151MT | 150±20%    | 0.975                   | 0.750 | 3.7                        | 0.65                                | 0.67 | 0.60                                 | 0.70 |
| SWPA5040S102MT | 1000±20%   | 7.800                   | 6.000 | 1.3                        | 0.21                                | 0.25 | 0.20                                 | 0.23 |

### SWPA6020S Series

| Part Number    | Inductance | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation<br>Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|------------|-------------------------|-------|----------------------------|-------------------------------------|------|--------------------------------------|------|
|                | @100kHz,1V | Max.                    | Typ.  | Min.                       | Max.                                | Typ. | Max.                                 | Typ. |
| Units          | µH         | Ω                       |       | MHz                        | A                                   |      | A                                    |      |
| Symbol         | L          | DCR                     |       | S.R.F                      | Isat                                |      | Irms                                 |      |
| SWPA6020SR50NT | 0.50±30%   | 0.018                   | 0.014 | 120                        | 4.50                                | 6.00 | 4.00                                 | 5.00 |
| SWPA6020SR68NT | 0.68±30%   | 0.022                   | 0.017 | 115                        | 6.55                                | 7.80 | 3.80                                 | 4.80 |
| SWPA6020SR82NT | 0.82±30%   | 0.022                   | 0.017 | 110                        | 5.30                                | 6.30 | 3.80                                 | 4.80 |
| SWPA6020S1R0NT | 1.0±30%    | 0.020                   | 0.020 | 100                        | 4.15                                | 5.00 | 3.50                                 | 4.40 |
| SWPA6020S1R2NT | 1.2±30%    | 0.029                   | 0.022 | 88                         | 5.90                                | 7.00 | 3.20                                 | 4.00 |
| SWPA6020S1R5NT | 1.5±30%    | 0.029                   | 0.022 | 79                         | 4.25                                | 5.10 | 3.20                                 | 4.00 |
| SWPA6020S1R8NT | 1.8±30%    | 0.036                   | 0.028 | 68                         | 4.85                                | 5.80 | 2.75                                 | 3.50 |
| SWPA6020S2R0NT | 2.0±30%    | 0.046                   | 0.035 | 65                         | 4.10                                | 4.90 | 2.60                                 | 3.30 |
| SWPA6020S2R2NT | 2.2±30%    | 0.036                   | 0.028 | 61                         | 3.75                                | 4.50 | 2.75                                 | 3.50 |
| SWPA6020S2R7NT | 2.7±30%    | 0.046                   | 0.035 | 56                         | 3.90                                | 4.60 | 2.60                                 | 3.30 |
| SWPA6020S3R3NT | 3.3±30%    | 0.046                   | 0.035 | 51                         | 3.15                                | 3.70 | 2.60                                 | 3.30 |
| SWPA6020S3R9NT | 3.9±30%    | 0.064                   | 0.049 | 45                         | 3.25                                | 3.90 | 2.10                                 | 2.60 |
| SWPA6020S4R3NT | 4.3±30%    | 0.064                   | 0.049 | 44                         | 2.70                                | 3.20 | 2.10                                 | 2.60 |
| SWPA6020S4R7NT | 4.7±30%    | 0.075                   | 0.058 | 41                         | 3.00                                | 3.60 | 2.00                                 | 2.50 |
| SWPA6020S5R6NT | 5.6±30%    | 0.075                   | 0.058 | 36                         | 2.40                                | 2.90 | 1.90                                 | 2.40 |
| SWPA6020S6R2NT | 6.2±30%    | 0.103                   | 0.079 | 31                         | 2.30                                | 2.70 | 1.80                                 | 2.30 |
| SWPA6020S6R8NT | 6.8±30%    | 0.103                   | 0.079 | 31                         | 2.20                                | 2.60 | 1.80                                 | 2.30 |
| SWPA6020S8R2NT | 8.2±30%    | 0.137                   | 0.105 | 27                         | 2.10                                | 2.50 | 1.40                                 | 1.80 |

## SPECIFICATIONS

### SWPA6020S Series

| Part Number    | Inductance       | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation<br>Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|------------------|-------------------------|-------|----------------------------|-------------------------------------|------|--------------------------------------|------|
|                |                  | Max.                    | Typ.  |                            | Min.                                | Max. | Typ.                                 | Max. |
| Units          | @100kHz,1V<br>µH | Ω                       |       | MHz                        | A                                   |      | A                                    |      |
| Symbol         | L                | DCR                     |       | S.R.F                      | Isat                                |      | Irms                                 |      |
| SWPA6020S100MT | 10±20%           | 0.137                   | 0.105 | 27                         | 1.75                                | 2.10 | 1.40                                 | 1.80 |
| SWPA6020S120MT | 12±20%           | 0.156                   | 0.120 | 25                         | 1.45                                | 1.70 | 1.30                                 | 1.60 |
| SWPA6020S150MT | 15±20%           | 0.189                   | 0.145 | 21                         | 1.20                                | 1.40 | 1.20                                 | 1.50 |
| SWPA6020S180MT | 18±20%           | 0.234                   | 0.180 | 18                         | 1.20                                | 1.40 | 1.08                                 | 1.40 |
| SWPA6020S220MT | 22±20%           | 0.265                   | 0.204 | 16                         | 1.05                                | 1.20 | 1.00                                 | 1.30 |
| SWPA6020S330MT | 33±20%           | 0.390                   | 0.300 | 11                         | 0.95                                | 1.10 | 0.84                                 | 1.05 |
| SWPA6020S470MT | 47±20%           | 0.559                   | 0.430 | 10                         | 0.70                                | 0.90 | 0.80                                 | 0.90 |
| SWPA6020S331MT | 330±20%          | 3.419                   | 2.630 | 3                          | 0.27                                | 0.33 | 0.33                                 | 0.39 |

### SWPA6028S Series

| Part Number    | Inductance       | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation<br>Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|------------------|-------------------------|-------|----------------------------|-------------------------------------|------|--------------------------------------|------|
|                |                  | Max.                    | Typ.  |                            | Min.                                | Max. | Typ.                                 | Max. |
| Units          | @100kHz,1V<br>µH | Ω                       |       | MHz                        | A                                   |      | A                                    |      |
| Symbol         | L                | DCR                     |       | S.R.F                      | Isat                                |      | Irms                                 |      |
| SWPA6028SR82NT | 0.82±30%         | 0.016                   | 0.012 | 97                         | 6.50                                | 9.00 | 5.20                                 | 6.00 |
| SWPA6028S1R0NT | 1.0±30%          | 0.013                   | 0.010 | 70                         | 5.75                                | 7.00 | 5.20                                 | 5.70 |
| SWPA6028S1R2NT | 1.2±30%          | 0.017                   | 0.013 | 69                         | 6.40                                | 7.50 | 4.58                                 | 5.00 |
| SWPA6028S1R5NT | 1.5±30%          | 0.017                   | 0.013 | 65                         | 6.00                                | 6.60 | 4.58                                 | 5.00 |
| SWPA6028S2R2NT | 2.2±30%          | 0.026                   | 0.020 | 48                         | 5.10                                | 5.60 | 3.75                                 | 4.10 |
| SWPA6028S2R7NT | 2.7±30%          | 0.026                   | 0.020 | 48                         | 3.80                                | 4.10 | 3.75                                 | 4.10 |
| SWPA6028S3R3NT | 3.3±30%          | 0.033                   | 0.025 | 41                         | 4.15                                | 4.50 | 3.48                                 | 3.80 |
| SWPA6028S4R7NT | 4.7±30%          | 0.039                   | 0.030 | 35                         | 3.00                                | 3.30 | 3.08                                 | 3.40 |
| SWPA6028S5R1NT | 5.1±30%          | 0.056                   | 0.043 | 32                         | 3.20                                | 3.50 | 2.60                                 | 2.80 |
| SWPA6028S6R2MT | 6.2±20%          | 0.061                   | 0.047 | 30                         | 3.05                                | 3.30 | 2.40                                 | 2.60 |
| SWPA6028S6R8MT | 6.8±20%          | 0.061                   | 0.047 | 27                         | 2.60                                | 3.00 | 2.40                                 | 2.60 |
| SWPA6028S8R2MT | 8.2±20%          | 0.072                   | 0.055 | 24                         | 2.30                                | 2.50 | 2.25                                 | 2.50 |
| SWPA6028S9R1MT | 9.1±20%          | 0.096                   | 0.074 | 24                         | 2.55                                | 2.80 | 2.15                                 | 2.40 |
| SWPA6028S100MT | 10±20%           | 0.094                   | 0.072 | 23                         | 2.04                                | 2.50 | 1.95                                 | 2.40 |
| SWPA6028S120MT | 12±20%           | 0.104                   | 0.080 | 18                         | 1.80                                | 2.00 | 1.85                                 | 2.00 |
| SWPA6028S150MT | 15±20%           | 0.163                   | 0.125 | 18                         | 1.75                                | 1.90 | 1.45                                 | 1.60 |
| SWPA6028S180MT | 18±20%           | 0.156                   | 0.120 | 15                         | 1.52                                | 1.80 | 1.45                                 | 1.60 |
| SWPA6028S220MT | 22±20%           | 0.182                   | 0.140 | 14                         | 1.45                                | 1.80 | 1.40                                 | 1.60 |
| SWPA6028S270MT | 27±20%           | 0.202                   | 0.155 | 13                         | 1.50                                | 1.60 | 1.32                                 | 1.40 |
| SWPA6028S330MT | 33±20%           | 0.241                   | 0.185 | 12                         | 1.35                                | 1.50 | 1.22                                 | 1.30 |
| SWPA6028S360MT | 36±20%           | 0.280                   | 0.215 | 11                         | 1.25                                | 1.40 | 1.13                                 | 1.20 |
| SWPA6028S390MT | 39±20%           | 0.293                   | 0.225 | 11                         | 1.25                                | 1.40 | 1.10                                 | 1.20 |
| SWPA6028S470MT | 47±20%           | 0.410                   | 0.315 | 9.5                        | 1.15                                | 1.30 | 1.06                                 | 1.10 |
| SWPA6028S560MT | 56±20%           | 0.449                   | 0.345 | 8.2                        | 1.05                                | 1.20 | 0.89                                 | 1.00 |
| SWPA6028S680MT | 68±20%           | 0.468                   | 0.360 | 7.7                        | 0.80                                | 0.95 | 0.86                                 | 0.95 |
| SWPA6028S750MT | 75±20%           | 0.533                   | 0.410 | 7.7                        | 0.90                                | 0.99 | 0.81                                 | 0.90 |
| SWPA6028S820MT | 82±20%           | 0.650                   | 0.500 | 7.7                        | 0.80                                | 0.88 | 0.70                                 | 0.77 |
| SWPA6028S101MT | 100±20%          | 0.650                   | 0.500 | 7.1                        | 0.65                                | 0.71 | 0.70                                 | 0.77 |
| SWPA6028S401MT | 400±20%          | 2.808                   | 2.160 | 2.8                        | 0.30                                | 0.33 | 0.40                                 | 0.45 |
| SWPA6028S102MT | 1000±20%         | 7.540                   | 5.800 | 1.5                        | 0.18                                | 0.22 | 0.23                                 | 0.26 |

## SPECIFICATIONS

### SWPA6040S Series

| Part Number    | Inductance       | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation<br>Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|------------------|-------------------------|-------|----------------------------|-------------------------------------|------|--------------------------------------|------|
|                |                  | Max.                    | Typ.  |                            | Min.                                | Max. | Typ.                                 | Max. |
| Units          | @100kHz,1V<br>µH | Ω                       |       | MHz                        | A                                   |      | A                                    |      |
| Symbol         | L                | DCR                     |       | S.R.F                      | Isat                                |      | Irms                                 |      |
| SWPA6040S1R0MT | 1.0±20%          | 0.010                   | 0.008 | 97                         | 7.85                                | 9.05 | 6.30                                 | 7.20 |
| SWPA6040S100MT | 10±20%           | 0.062                   | 0.048 | 16                         | 3.20                                | 3.50 | 2.45                                 | 2.80 |
| SWPA6040S120MT | 12±20%           | 0.075                   | 0.058 | 14                         | 2.80                                | 3.25 | 2.20                                 | 2.55 |
| SWPA6040S150MT | 15±20%           | 0.088                   | 0.068 | 13                         | 2.50                                | 3.00 | 2.05                                 | 2.35 |
| SWPA6040S220MT | 22±20%           | 0.116                   | 0.089 | 10                         | 2.05                                | 2.50 | 1.80                                 | 2.05 |
| SWPA6040S330MT | 33±20%           | 0.178                   | 0.137 | 9.9                        | 1.65                                | 2.00 | 1.45                                 | 1.65 |
| SWPA6040S680MT | 68±20%           | 0.370                   | 0.285 | 5.6                        | 1.15                                | 1.40 | 0.95                                 | 1.10 |
| SWPA6040S471MT | 470±20%          | 2.500                   | 1.790 | 2.0                        | 0.42                                | 0.50 | 0.47                                 | 0.55 |

### SWPA6045S Series

| Part Number    | Inductance       | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation<br>Current <sup>*3</sup> |       | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|------------------|-------------------------|-------|----------------------------|-------------------------------------|-------|--------------------------------------|------|
|                |                  | Max.                    | Typ.  |                            | Min.                                | Max.  | Typ.                                 | Max. |
| Units          | @100kHz,1V<br>µH | Ω                       |       | MHz                        | A                                   |       | A                                    |      |
| Symbol         | L                | DCR                     |       | S.R.F                      | Isat                                |       | Irms                                 |      |
| SWPA6045SR47NT | 0.47±30%         | 0.008                   | 0.006 | 155                        | 15.00                               | 16.50 | 6.50                                 | 6.60 |
| SWPA6045SR56NT | 0.56±30%         | 0.008                   | 0.006 | 142                        | 15.00                               | 14.00 | 6.50                                 | 7.50 |
| SWPA6045SR68NT | 0.68±30%         | 0.008                   | 0.006 | 99                         | 11.00                               | 12.00 | 5.70                                 | 6.50 |
| SWPA6045SR82NT | 0.82±30%         | 0.010                   | 0.008 | 140                        | 10.35                               | 11.00 | 5.90                                 | 6.50 |
| SWPA6045S1R0NT | 1.0±30%          | 0.014                   | 0.011 | 100                        | 9.85                                | 10.00 | 5.14                                 | 5.60 |
| SWPA6045S1R2NT | 1.2±30%          | 0.013                   | 0.010 | 100                        | 8.35                                | 9.10  | 5.40                                 | 5.90 |
| SWPA6045S1R3NT | 1.3±30%          | 0.013                   | 0.010 | 100                        | 8.35                                | 9.10  | 5.40                                 | 5.90 |
| SWPA6045S1R5NT | 1.5±30%          | 0.016                   | 0.012 | 65                         | 8.80                                | 9.70  | 4.95                                 | 5.40 |
| SWPA6045S1R8NT | 1.8±30%          | 0.016                   | 0.012 | 74                         | 7.60                                | 8.40  | 4.95                                 | 5.40 |
| SWPA6045S2R2NT | 2.2±30%          | 0.018                   | 0.014 | 52                         | 6.75                                | 7.40  | 4.60                                 | 5.00 |
| SWPA6045S2R3NT | 2.3±30%          | 0.027                   | 0.021 | 60                         | 6.00                                | 6.60  | 3.50                                 | 3.80 |
| SWPA6045S2R7NT | 2.7±30%          | 0.020                   | 0.015 | 38                         | 5.75                                | 6.30  | 4.30                                 | 4.70 |
| SWPA6045S3R0NT | 3.0±30%          | 0.026                   | 0.020 | 35                         | 5.60                                | 6.20  | 3.80                                 | 4.20 |
| SWPA6045S3R3NT | 3.3±30%          | 0.027                   | 0.021 | 32                         | 5.90                                | 6.20  | 3.70                                 | 4.00 |
| SWPA6045S3R6NT | 3.6±30%          | 0.027                   | 0.021 | 28                         | 5.25                                | 5.70  | 3.70                                 | 4.00 |
| SWPA6045S4R3MT | 4.3±20%          | 0.030                   | 0.023 | 23                         | 4.45                                | 4.90  | 3.50                                 | 3.80 |
| SWPA6045S4R5MT | 4.5±20%          | 0.034                   | 0.026 | 24                         | 4.97                                | 5.50  | 3.30                                 | 3.60 |
| SWPA6045S4R7MT | 4.7±20%          | 0.034                   | 0.026 | 24                         | 4.97                                | 5.50  | 3.30                                 | 3.60 |
| SWPA6045S5R1MT | 5.1±20%          | 0.034                   | 0.026 | 23                         | 4.40                                | 4.80  | 3.30                                 | 3.60 |
| SWPA6045S5R6MT | 5.6±20%          | 0.038                   | 0.029 | 23                         | 4.15                                | 4.60  | 3.15                                 | 3.40 |
| SWPA6045S6R2MT | 6.2±20%          | 0.040                   | 0.031 | 26                         | 4.43                                | 4.80  | 3.00                                 | 3.30 |
| SWPA6045S6R3MT | 6.3±20%          | 0.040                   | 0.031 | 26                         | 4.43                                | 4.70  | 3.00                                 | 3.30 |
| SWPA6045S6R8MT | 6.8±20%          | 0.040                   | 0.031 | 20                         | 3.90                                | 4.30  | 3.00                                 | 3.30 |
| SWPA6045S7R5MT | 7.5±20%          | 0.044                   | 0.034 | 18                         | 3.50                                | 3.80  | 2.90                                 | 3.20 |
| SWPA6045S8R2MT | 8.2±20%          | 0.056                   | 0.043 | 21                         | 3.90                                | 4.30  | 2.60                                 | 2.80 |
| SWPA6045S9R1MT | 9.1±20%          | 0.056                   | 0.043 | 17                         | 3.35                                | 3.70  | 2.60                                 | 2.80 |
| SWPA6045S100MT | 10±20%           | 0.062                   | 0.048 | 15                         | 3.20                                | 3.50  | 2.45                                 | 2.70 |
| SWPA6045S120MT | 12±20%           | 0.075                   | 0.058 | 13                         | 2.80                                | 3.00  | 2.20                                 | 2.40 |
| SWPA6045S150MT | 15±20%           | 0.088                   | 0.068 | 12                         | 2.50                                | 2.70  | 2.05                                 | 2.20 |
| SWPA6045S180MT | 18±20%           | 0.105                   | 0.081 | 10                         | 2.20                                | 2.40  | 1.85                                 | 2.00 |
| SWPA6045S220MT | 22±20%           | 0.116                   | 0.089 | 10                         | 2.05                                | 2.20  | 1.80                                 | 2.00 |
| SWPA6045S270MT | 27±20%           | 0.133                   | 0.102 | 9.2                        | 1.90                                | 2.10  | 1.65                                 | 1.80 |

# SPECIFICATIONS

## SWPA6045S Series

| Part Number    | Inductance       | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation<br>Current <sup>3</sup> |      | Heat Rating<br>Current <sup>4</sup> |      |
|----------------|------------------|-------------------------|-------|----------------------------|------------------------------------|------|-------------------------------------|------|
|                |                  | Max.                    | Typ.  |                            | Min.                               | Max. | Typ.                                | Max. |
| Units          | @100kHz,1V<br>μH | Ω                       |       | MHz                        | A                                  |      | A                                   |      |
| Symbol         | L                | DCR                     |       | S.R.F                      | Isat                               |      | Irms                                |      |
| SWPA6045S300MT | 30±20%           | 0.172                   | 0.132 | 7.8                        | 1.70                               | 1.80 | 1.50                                | 1.60 |
| SWPA6045S330MT | 33±20%           | 0.178                   | 0.137 | 7.8                        | 1.65                               | 1.80 | 1.45                                | 1.60 |
| SWPA6045S360MT | 36±20%           | 0.225                   | 0.173 | 7.8                        | 1.62                               | 1.80 | 1.40                                | 1.50 |
| SWPA6045S390MT | 39±20%           | 0.234                   | 0.180 | 7.8                        | 1.50                               | 1.60 | 1.25                                | 1.40 |
| SWPA6045S430MT | 43±20%           | 0.260                   | 0.200 | 7.7                        | 1.63                               | 1.80 | 1.20                                | 1.30 |
| SWPA6045S470MT | 47±20%           | 0.260                   | 0.200 | 6.4                        | 1.40                               | 1.50 | 1.20                                | 1.30 |
| SWPA6045S510MT | 51±20%           | 0.269                   | 0.207 | 6.4                        | 1.35                               | 1.50 | 1.15                                | 1.20 |
| SWPA6045S560MT | 56±20%           | 0.287                   | 0.221 | 6.4                        | 1.30                               | 1.40 | 1.10                                | 1.20 |
| SWPA6045S620MT | 62±20%           | 0.306                   | 0.235 | 6.4                        | 1.25                               | 1.40 | 1.10                                | 1.20 |
| SWPA6045S680MT | 68±20%           | 0.376                   | 0.289 | 6.4                        | 1.20                               | 1.30 | 1.00                                | 1.10 |
| SWPA6045S750MT | 75±20%           | 0.397                   | 0.305 | 5                          | 1.15                               | 1.20 | 0.95                                | 1.00 |
| SWPA6045S820MT | 82±20%           | 0.443                   | 0.341 | 4.9                        | 1.05                               | 1.10 | 0.90                                | 0.99 |
| SWPA6045S910MT | 91±20%           | 0.467                   | 0.359 | 4.9                        | 1.00                               | 1.10 | 0.85                                | 0.94 |
| SWPA6045S101MT | 100±20%          | 0.563                   | 0.433 | 4.2                        | 0.95                               | 1.00 | 0.80                                | 0.88 |
| SWPA6045S121MT | 120±20%          | 0.629                   | 0.484 | 4.2                        | 0.85                               | 0.94 | 0.77                                | 0.85 |
| SWPA6045S151MT | 150±20%          | 0.754                   | 0.580 | 4.2                        | 0.80                               | 0.88 | 0.70                                | 0.77 |
| SWPA6045S221MT | 220±20%          | 1.084                   | 0.834 | 3.5                        | 0.70                               | 0.77 | 0.59                                | 0.65 |
| SWPA6045S331MT | 330±20%          | 1.651                   | 1.270 | 2.8                        | 0.57                               | 0.63 | 0.57                                | 0.63 |
| SWPA6045S471MT | 470±20%          | 2.340                   | 1.800 | 2.0                        | 0.50                               | 0.56 | 0.42                                | 0.48 |
| SWPA6045S681MT | 680±20%          | 3.250                   | 2.500 | 1.7                        | 0.42                               | 0.46 | 0.33                                | 0.38 |
| SWPA6045S102MT | 1000±20%         | 5.850                   | 4.500 | 0.5                        | 0.30                               | 0.35 | 0.30                                | 0.35 |
| SWPA6045S152MT | 1500±20%         | 8.450                   | 6.500 | 0.8                        | 0.24                               | 0.27 | 0.21                                | 0.24 |

## SWPA8040S Series

| Part Number    | Inductance       | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation<br>Current <sup>3</sup> |       | Heat Rating<br>Current <sup>4</sup> |      |
|----------------|------------------|-------------------------|-------|----------------------------|------------------------------------|-------|-------------------------------------|------|
|                |                  | Max.                    | Typ.  |                            | Min.                               | Max.  | Typ.                                | Max. |
| Units          | @100kHz,1V<br>μH | Ω                       |       | MHz                        | A                                  |       | A                                   |      |
| Symbol         | L                | DCR                     |       | S.R.F                      | Isat                               |       | Irms                                |      |
| SWPA8040SR82NT | 0.82±30%         | 0.010                   | 0.008 | 94                         | 13.80                              | 16.00 | 6.30                                | 6.90 |
| SWPA8040S1R0NT | 1.0±30%          | 0.010                   | 0.008 | 89                         | 9.85                               | 14.00 | 6.30                                | 6.90 |
| SWPA8040S1R2NT | 1.2±30%          | 0.013                   | 0.010 | 59                         | 10.00                              | 14.00 | 5.65                                | 6.20 |
| SWPA8040S1R5NT | 1.5±30%          | 0.013                   | 0.010 | 67                         | 8.15                               | 11.00 | 5.65                                | 6.20 |
| SWPA8040S2R0NT | 2.0±30%          | 0.016                   | 0.012 | 43                         | 9.25                               | 10.00 | 5.15                                | 5.60 |
| SWPA8040S2R2NT | 2.2±30%          | 0.016                   | 0.012 | 41                         | 7.10                               | 8.00  | 5.15                                | 5.60 |
| SWPA8040S3R0NT | 3.0±30%          | 0.018                   | 0.014 | 32                         | 6.10                               | 7.00  | 4.70                                | 5.20 |
| SWPA8040S3R3NT | 3.3±30%          | 0.022                   | 0.017 | 27                         | 6.50                               | 7.00  | 4.40                                | 4.80 |
| SWPA8040S3R6NT | 3.6±30%          | 0.022                   | 0.017 | 30                         | 7.52                               | 8.50  | 4.35                                | 4.80 |
| SWPA8040S3R9NT | 3.9±30%          | 0.022                   | 0.017 | 26                         | 5.75                               | 6.50  | 4.35                                | 4.80 |
| SWPA8040S4R7NT | 4.7±30%          | 0.025                   | 0.019 | 24                         | 5.90                               | 6.50  | 4.10                                | 4.50 |
| SWPA8040S5R1NT | 5.1±30%          | 0.025                   | 0.019 | 22                         | 4.70                               | 5.40  | 4.05                                | 4.40 |
| SWPA8040S5R6NT | 5.6±30%          | 0.027                   | 0.021 | 24                         | 6.00                               | 6.90  | 3.85                                | 4.20 |
| SWPA8040S6R2NT | 6.2±30%          | 0.027                   | 0.021 | 20                         | 4.45                               | 5.10  | 3.85                                | 4.20 |
| SWPA8040S6R8MT | 6.8±20%          | 0.031                   | 0.024 | 20                         | 4.55                               | 5.20  | 3.60                                | 4.00 |
| SWPA8040S8R2MT | 8.2±20%          | 0.034                   | 0.026 | 17                         | 4.20                               | 4.80  | 3.45                                | 3.80 |
| SWPA8040S100MT | 10±20%           | 0.038                   | 0.029 | 15                         | 3.60                               | 4.10  | 3.30                                | 3.60 |
| SWPA8040S120MT | 12±20%           | 0.053                   | 0.041 | 13                         | 3.50                               | 4.00  | 2.80                                | 3.00 |

## SPECIFICATIONS

### SWPA8040S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation<br>Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|--------------------------|-------------------------|-------|------------------------------------|-------------------------------------|------|--------------------------------------|------|
|                |                          | Max.                    | Typ.  |                                    | Max.                                | Typ. | Max.                                 | Typ. |
| Units          | μH                       | Ω                       |       | MHz                                | A                                   |      | A                                    |      |
| Symbol         | L                        | DCR                     |       | S.R.F                              | Isat                                |      | I <sub>rms</sub>                     |      |
| SWPA8040S150MT | 15±20%                   | 0.061                   | 0.047 | 12                                 | 2.95                                | 3.40 | 2.60                                 | 2.80 |
| SWPA8040S180MT | 18±20%                   | 0.069                   | 0.053 | 11                                 | 2.70                                | 3.10 | 2.40                                 | 2.60 |
| SWPA8040S220MT | 22±20%                   | 0.090                   | 0.069 | 9.5                                | 2.40                                | 2.70 | 2.10                                 | 2.30 |
| SWPA8040S270MT | 27±20%                   | 0.101                   | 0.078 | 9.2                                | 2.15                                | 2.50 | 2.00                                 | 2.20 |
| SWPA8040S330MT | 33±20%                   | 0.126                   | 0.097 | 7.8                                | 2.05                                | 2.40 | 1.80                                 | 2.00 |
| SWPA8040S360MT | 36±20%                   | 0.133                   | 0.102 | 7.8                                | 2.00                                | 2.30 | 1.75                                 | 1.90 |
| SWPA8040S390MT | 39±20%                   | 0.139                   | 0.107 | 7.8                                | 1.95                                | 2.20 | 1.70                                 | 1.90 |
| SWPA8040S430MT | 43±20%                   | 0.147                   | 0.113 | 7.8                                | 1.90                                | 2.20 | 1.65                                 | 1.80 |
| SWPA8040S470MT | 47±20%                   | 0.177                   | 0.136 | 6.4                                | 1.75                                | 2.00 | 1.55                                 | 1.70 |
| SWPA8040S510MT | 51±20%                   | 0.185                   | 0.142 | 6.4                                | 1.70                                | 1.90 | 1.50                                 | 1.60 |
| SWPA8040S560MT | 56±20%                   | 0.192                   | 0.148 | 6.4                                | 1.55                                | 1.70 | 1.45                                 | 1.60 |
| SWPA8040S620MT | 62±20%                   | 0.237                   | 0.182 | 6.4                                | 1.50                                | 1.60 | 1.30                                 | 1.40 |
| SWPA8040S680MT | 68±20%                   | 0.255                   | 0.196 | 4.9                                | 1.45                                | 1.60 | 1.25                                 | 1.40 |
| SWPA8040S750MT | 75±20%                   | 0.274                   | 0.211 | 4.9                                | 1.35                                | 1.50 | 1.20                                 | 1.30 |
| SWPA8040S820MT | 82±20%                   | 0.293                   | 0.225 | 5.9                                | 1.30                                | 1.40 | 1.15                                 | 1.20 |
| SWPA8040S910MT | 91±20%                   | 0.354                   | 0.272 | 4.9                                | 1.20                                | 1.30 | 1.05                                 | 1.10 |
| SWPA8040S101MT | 100±20%                  | 0.377                   | 0.290 | 4.2                                | 1.15                                | 1.30 | 1.00                                 | 1.10 |
| SWPA8040S121MT | 120±20%                  | 0.434                   | 0.334 | 3.5                                | 1.05                                | 1.10 | 0.95                                 | 1.00 |
| SWPA8040S151MT | 150±20%                  | 0.533                   | 0.410 | 3.5                                | 1.10                                | 1.20 | 0.85                                 | 0.94 |
| SWPA8040S181MT | 180±20%                  | 0.676                   | 0.520 | 3.5                                | 0.95                                | 1.15 | 0.83                                 | 0.92 |
| SWPA8040S221MT | 220±20%                  | 0.779                   | 0.599 | 3.5                                | 0.85                                | 0.94 | 0.80                                 | 0.88 |
| SWPA8040S331MT | 330±20%                  | 1.156                   | 0.889 | 2.8                                | 0.68                                | 0.75 | 0.64                                 | 0.70 |
| SWPA8040S471MT | 470±20%                  | 1.625                   | 1.260 | 2.1                                | 0.60                                | 0.70 | 0.50                                 | 0.60 |
| SWPA8040S681MT | 680±20%                  | 2.652                   | 2.040 | 1.7                                | 0.50                                | 0.60 | 0.45                                 | 0.50 |
| SWPA8040S102MT | 1000±20%                 | 3.640                   | 2.800 | 1.4                                | 0.40                                | 0.50 | 0.35                                 | 0.40 |
| SWPA8040S152MT | 1500±20%                 | 6.500                   | 5.000 | 1.0                                | 0.32                                | 0.38 | 0.26                                 | 0.27 |

### SWPA8050S Series

| Part Number     | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency<br>Min. | Saturation<br>Current <sup>*3</sup> |      | Heat Rating<br>Current <sup>*4</sup> |      |
|-----------------|--------------------------|-------------------------|-------|------------------------------------|-------------------------------------|------|--------------------------------------|------|
|                 |                          | Max.                    | Typ.  |                                    | Max.                                | Typ. | Max.                                 | Typ. |
| Units           | μH                       | Ω                       |       | MHz                                | A                                   |      | A                                    |      |
| Symbol          | L                        | DCR                     |       | S.R.F                              | Isat                                |      | I <sub>rms</sub>                     |      |
| SWPA8050S102MT  | 1000±20%                 | 2.52                    | 2.10  | 1.5                                | 0.32                                | 0.35 | 0.33                                 | 0.35 |
| SWPA8050S103MT* | 10000±20%                | 22.80                   | 19.00 | 0.35                               | 0.09                                | 0.10 | 0.11                                 | 0.13 |

\*The test frequency of SWPA8050S103MT is 1KHz.

# SPECIFICATIONS

## SWPA8065S Series

| Part Number    | Inductance<br>@100kHz,1V | DC Resistance<br>(±30%) |       | Self-resonant<br>Frequency | Saturation<br>Current <sup>*3</sup> |       | Heat Rating<br>Current <sup>*4</sup> |      |
|----------------|--------------------------|-------------------------|-------|----------------------------|-------------------------------------|-------|--------------------------------------|------|
|                |                          | Max.                    | Typ.  |                            | Max.                                | Typ.  | Max.                                 | Typ. |
| Units          | μH                       | Ω                       |       | MHz                        | A                                   |       | A                                    |      |
| Symbol         | L                        | DCR                     |       | S.R.F                      | Isat                                |       | I <sub>rms</sub>                     |      |
| SWPA8065S3R3MT | 3.3±20%                  | 0.018                   | 0.015 | 27                         | 9.50                                | 10.00 | 5.10                                 | 5.90 |
| SWPA8065S4R7MT | 4.7±20%                  | 0.022                   | 0.018 | 18                         | 8.50                                | 9.50  | 4.70                                 | 5.40 |
| SWPA8065S5R6MT | 5.6±20%                  | 0.026                   | 0.022 | 17                         | 8.00                                | 9.00  | 4.50                                 | 5.20 |
| SWPA8065S6R8MT | 6.8±20%                  | 0.026                   | 0.022 | 16                         | 7.50                                | 8.00  | 4.50                                 | 5.20 |
| SWPA8065S8R2MT | 8.2±20%                  | 0.031                   | 0.026 | 15                         | 7.00                                | 7.70  | 4.20                                 | 4.80 |
| SWPA8065S220MT | 22±20%                   | 0.065                   | 0.054 | 8                          | 4.30                                | 4.80  | 2.85                                 | 3.30 |
| SWPA8065S431MT | 430±20%                  | 1.200                   | 1.000 | 1.5                        | 0.95                                | 1.05  | 0.61                                 | 0.69 |

※1: All test data is referenced to 20°C ambient;

※2: Rated current: Isat or I<sub>rms</sub>, whichever is smaller;

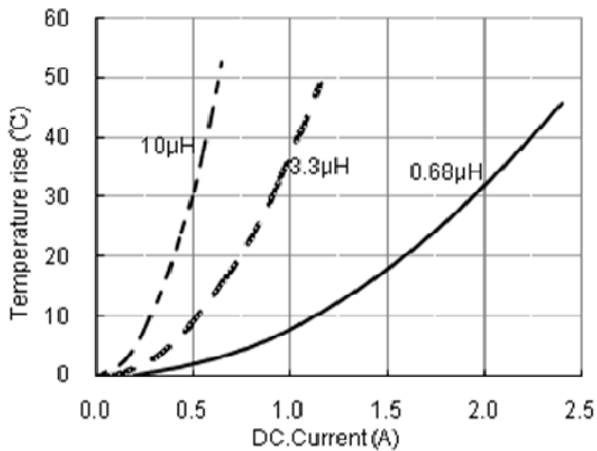
※\*3: Isat: DC current at which the inductance drops approximate 30% from its value without current;

※\*4: I<sub>rms</sub>: DC current that causes the temperature rise (ΔT =40°C) from 20°C ambient.

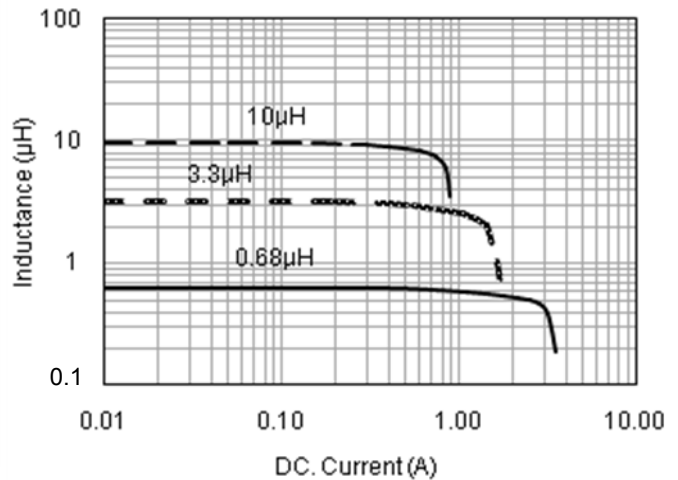
# TYPICAL ELECTRICAL CHARACTERISTICS

## SWPA252010S Series

Temperature vs. DC Current Characteristics

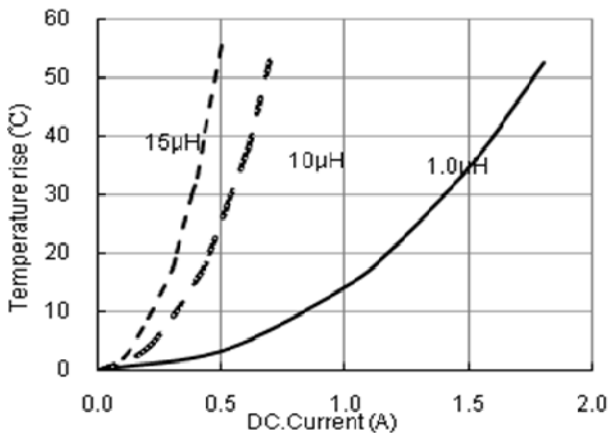


Inductance vs. DC Current Characteristics

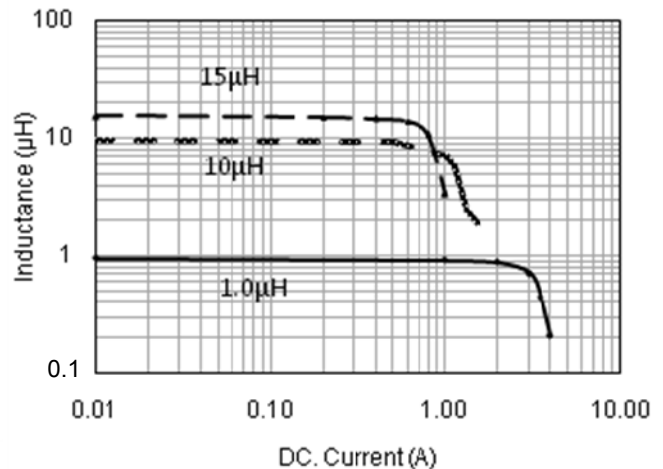


## SWPA252012S Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

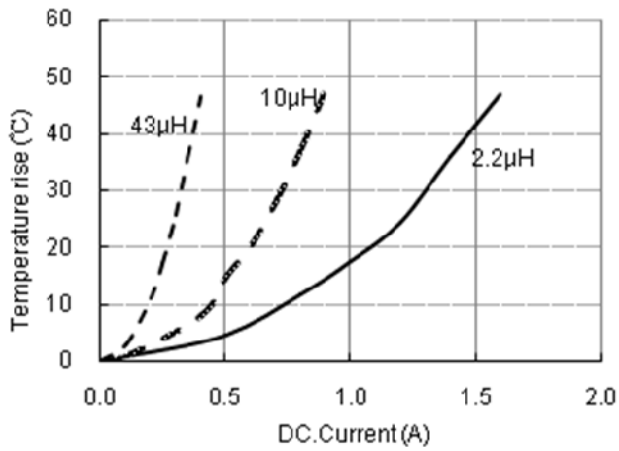




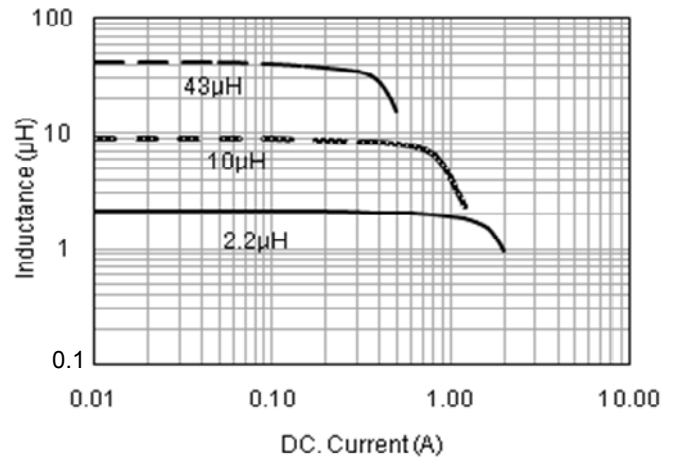
## TYPICAL ELECTRICAL CHARACTERISTICS

### SWPA3010S Series

Temperature vs. DC Current Characteristics

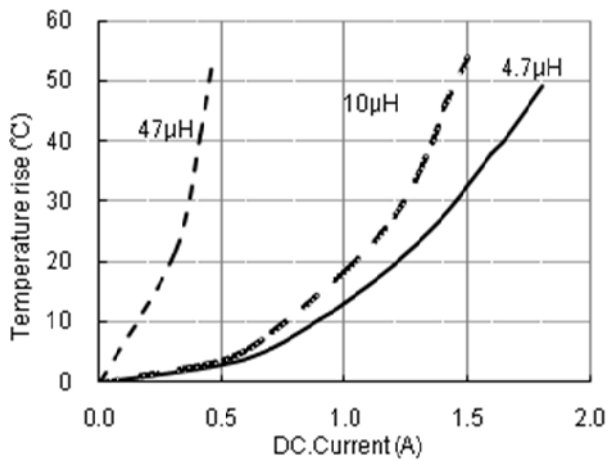


Inductance vs. DC Current Characteristics

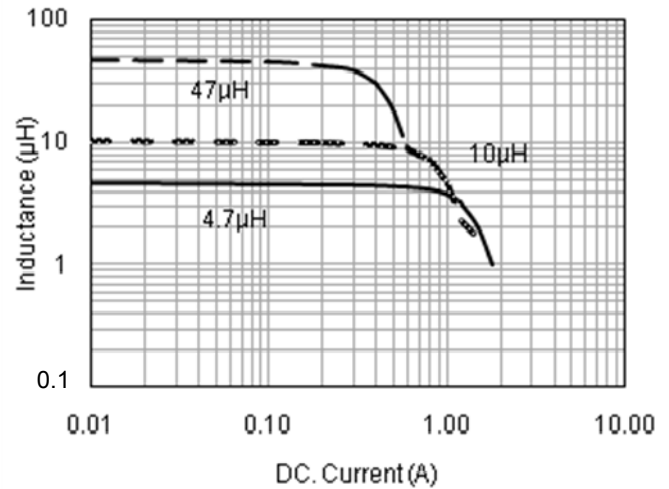


### SWPA3012S Series

Temperature vs. DC Current Characteristics

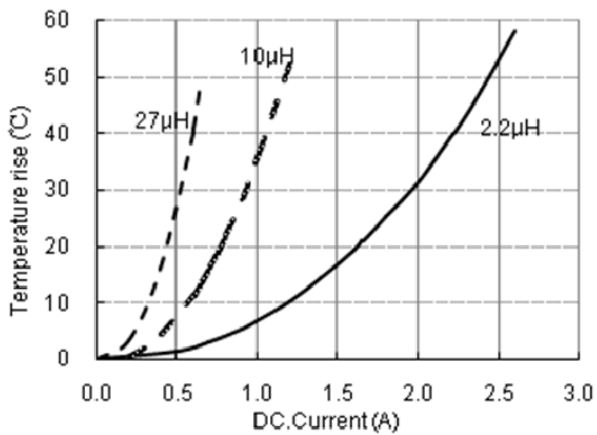


Inductance vs. DC Current Characteristics

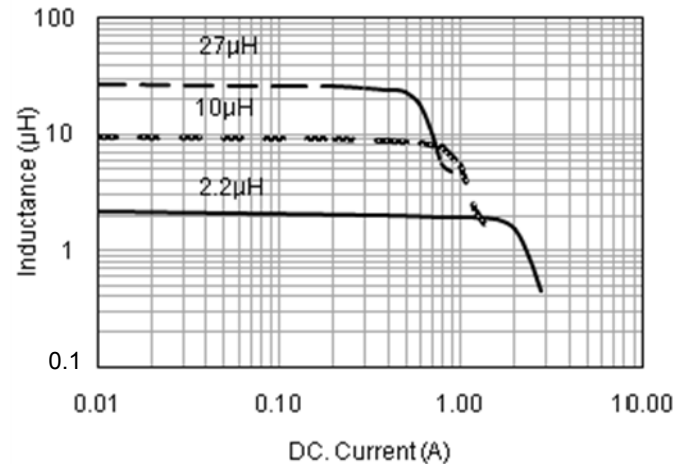


### SWPA3015S Series

Temperature vs. DC Current Characteristics



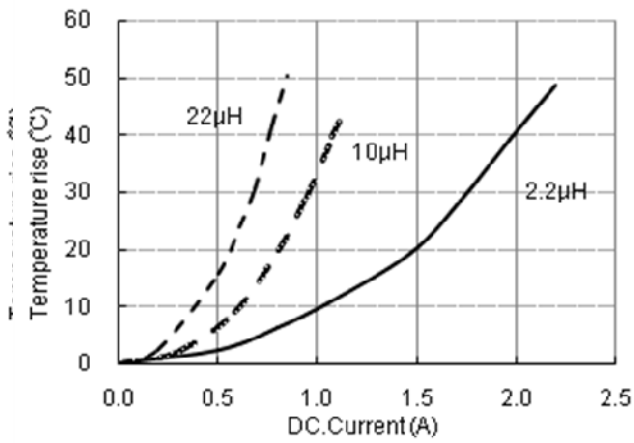
Inductance vs. DC Current Characteristics



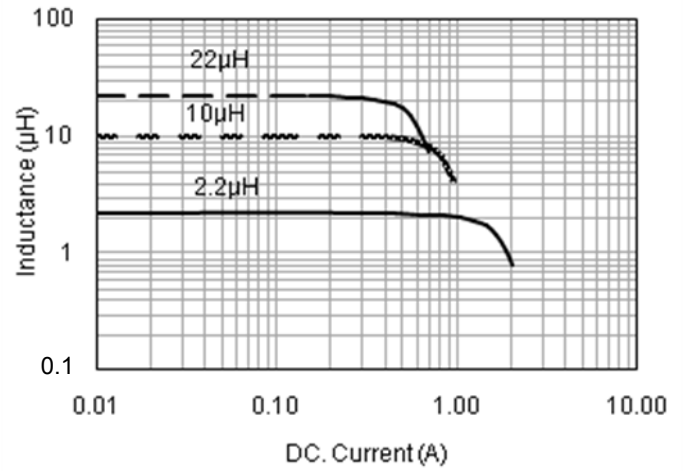
## TYPICAL ELECTRICAL CHARACTERISTICS

### SWPA4010S Series

Temperature vs. DC Current Characteristics

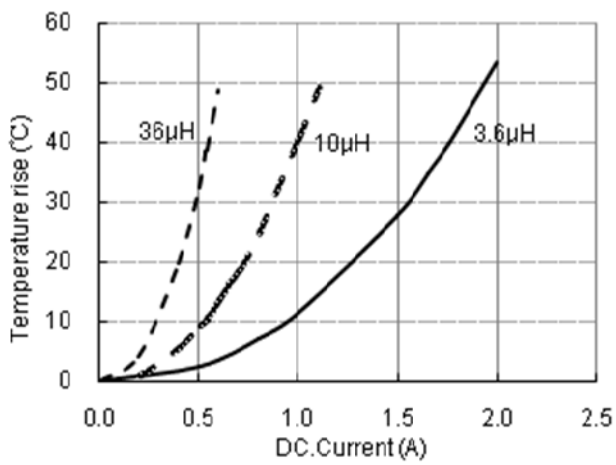


Inductance vs. DC Current Characteristic

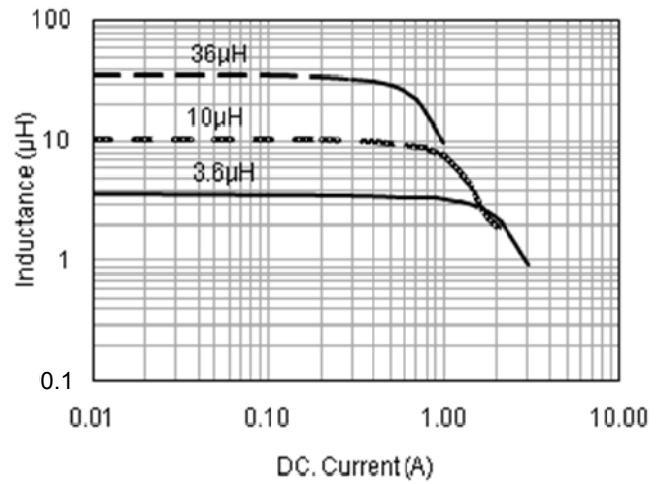


### SWPA4012S Series

Temperature vs. DC Current Characteristics

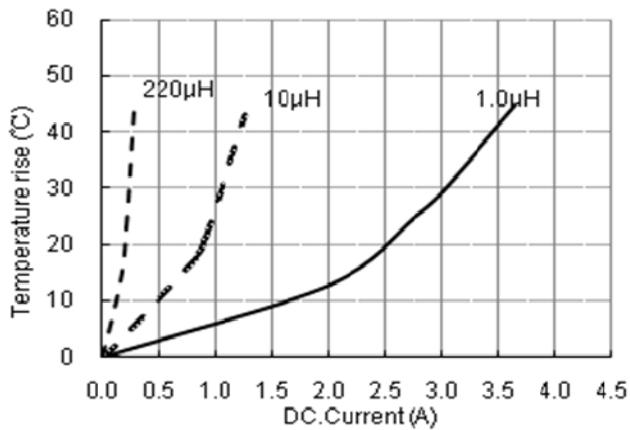


Inductance vs. DC Current Characteristic

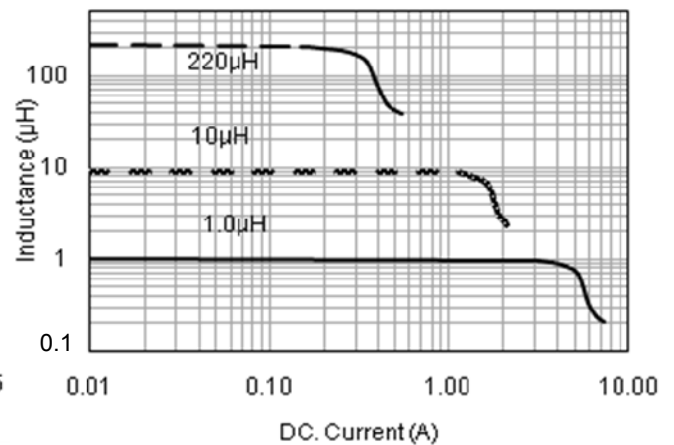


### SWPA4018S Series

Temperature vs. DC Current Characteristics



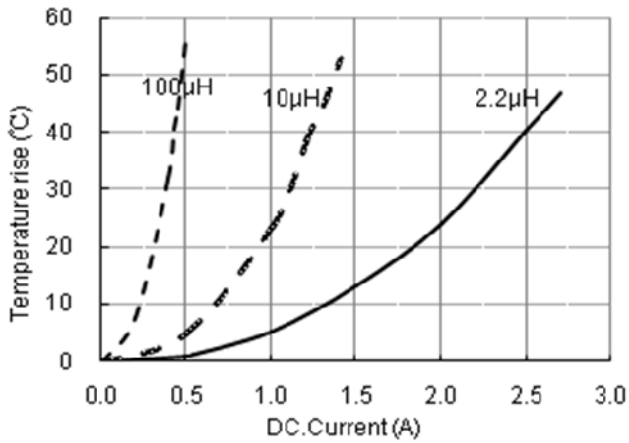
Inductance vs. DC Current Characteristics



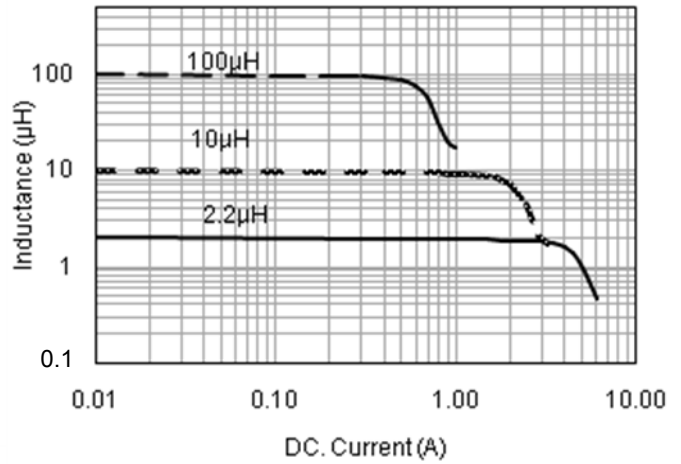
# TYPICAL ELECTRICAL CHARACTERISTICS

## SWPA4020S Series

Temperature vs. DC Current Characteristics

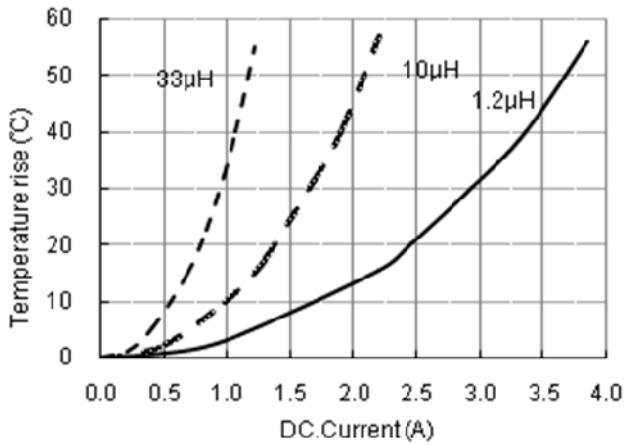


Inductance vs. DC Current Characteristics

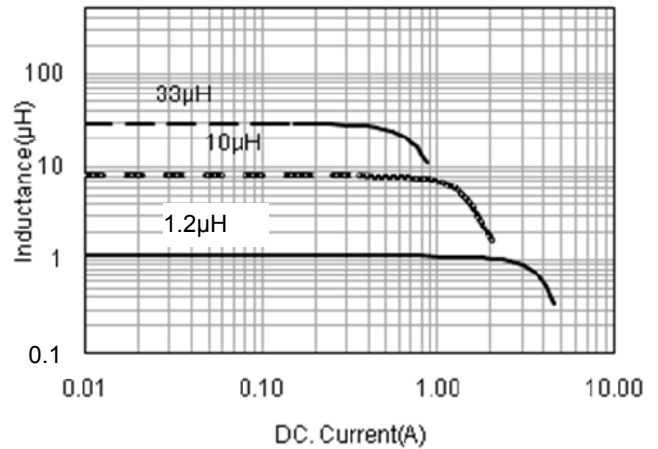


## SWPA4026S Series

Temperature vs. DC Current Characteristics

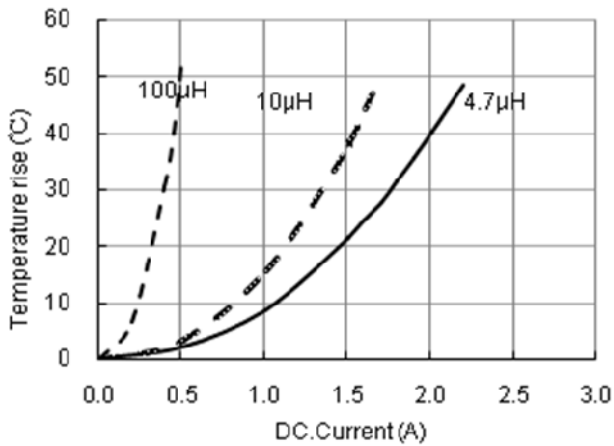


Inductance vs. DC Current Characteristics

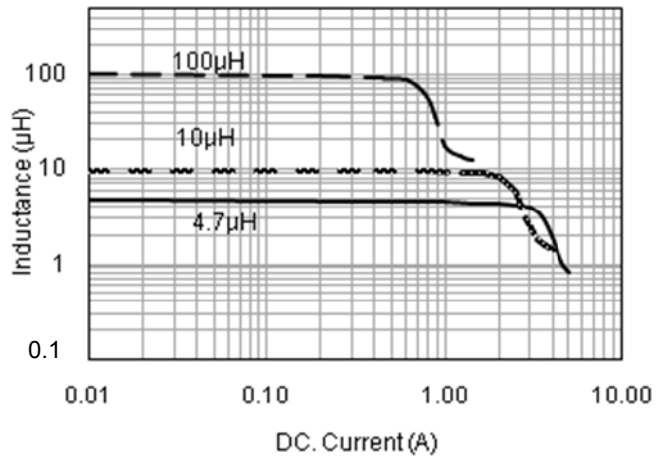


## SWPA4030S Series

Temperature vs. DC Current Characteristics



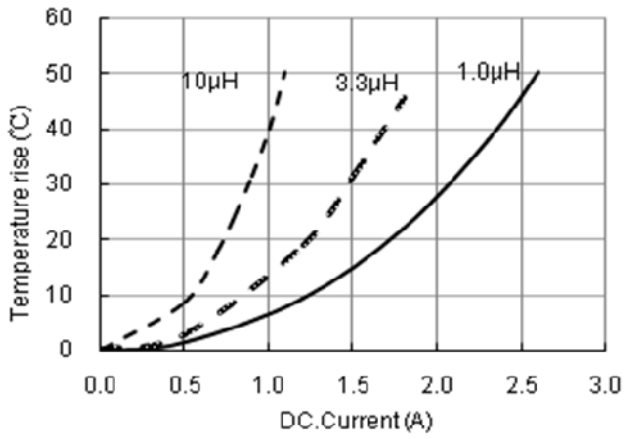
Inductance vs. DC Current Characteristics



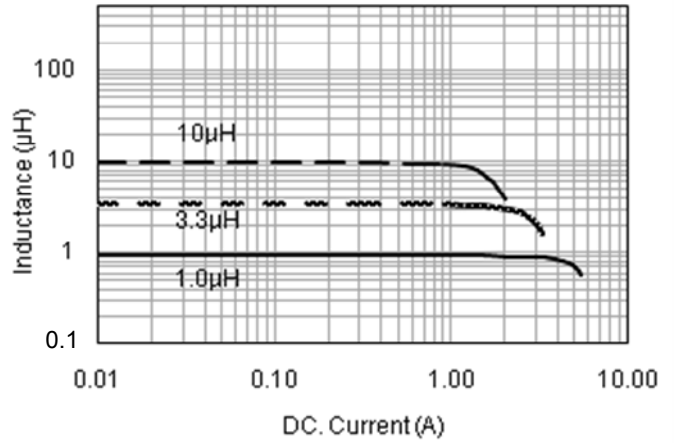
# TYPICAL ELECTRICAL CHARACTERISTICS

## SWPA5012S Series

Temperature vs. DC Current Characteristics

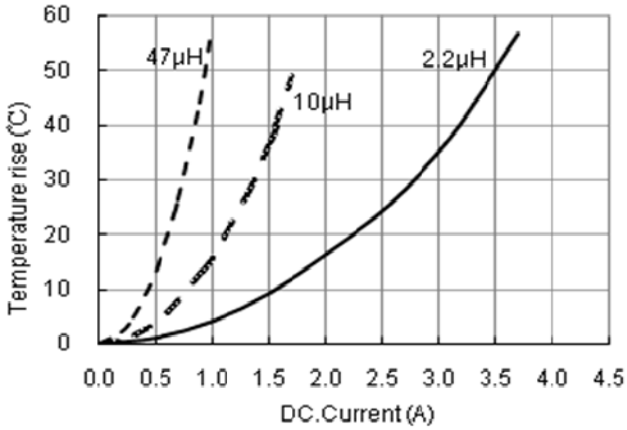


Inductance vs. DC Current Characteristics

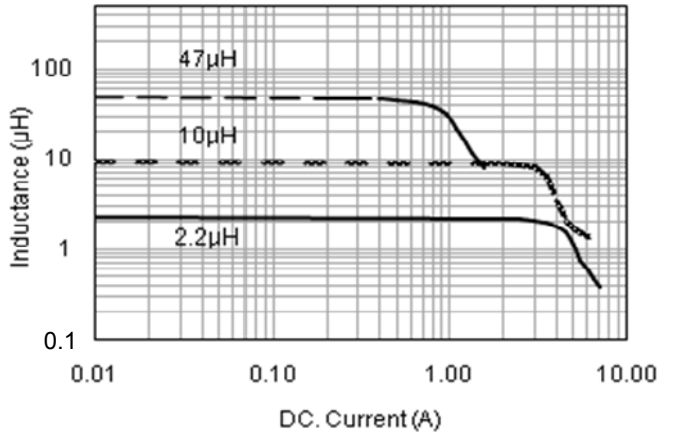


## SWPA5020S Series

Temperature vs. DC Current Characteristics

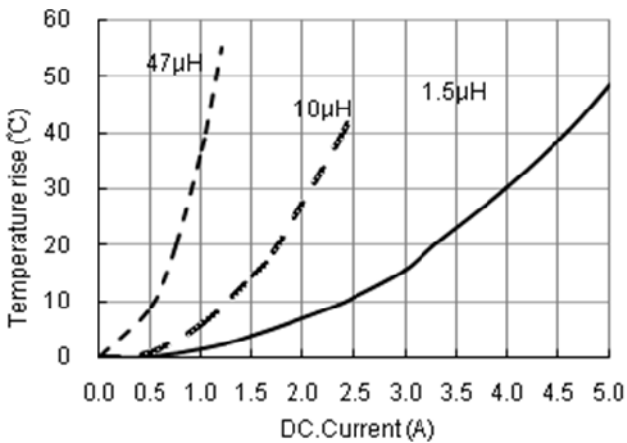


Inductance vs. DC Current Characteristics

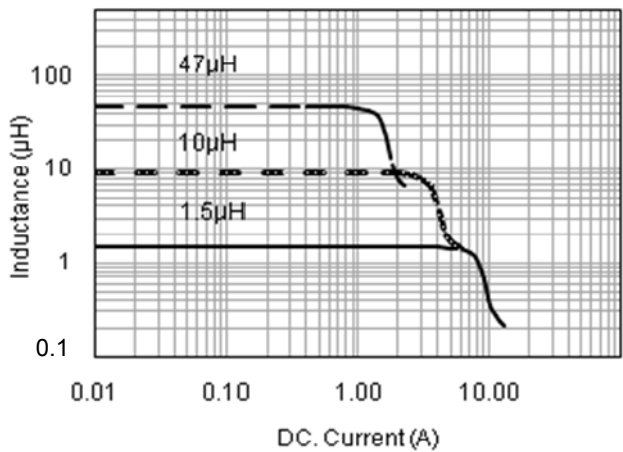


## SWPA5040S Series

Temperature vs. DC Current Characteristics



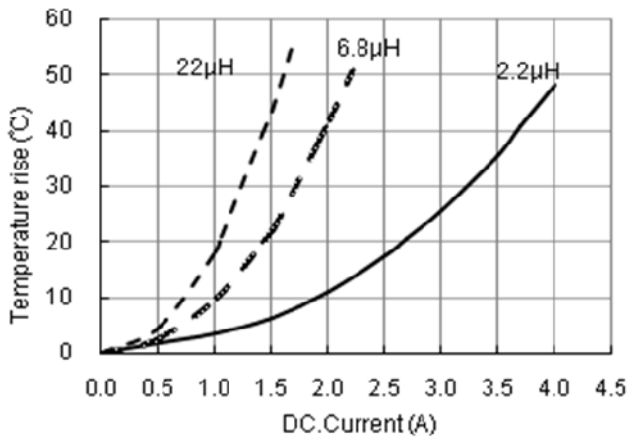
Inductance vs. DC Current Characteristics



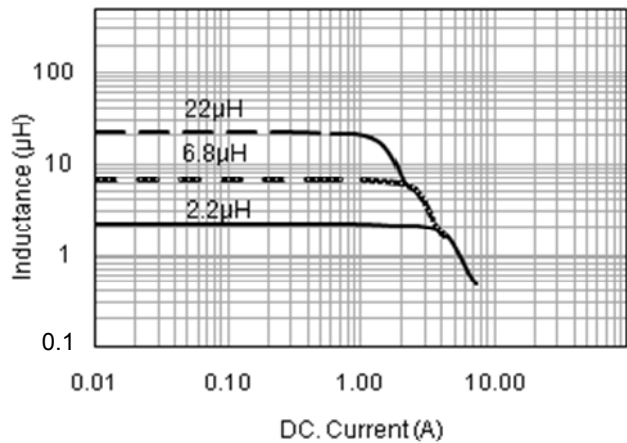
# TYPICAL ELECTRICAL CHARACTERISTICS

## SWPA6020S Series

Temperature vs. DC Current Characteristics

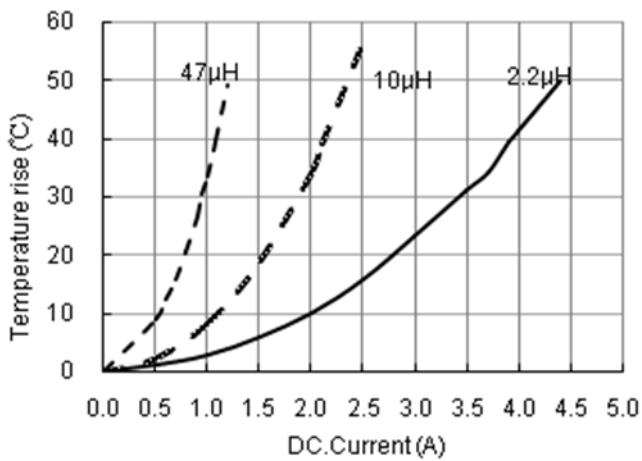


Inductance vs. DC Current Characteristics

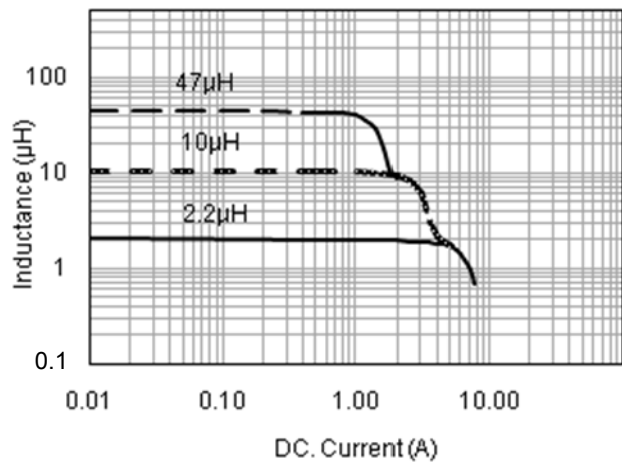


## SWPA6028S Series

Temperature vs. DC Current Characteristics

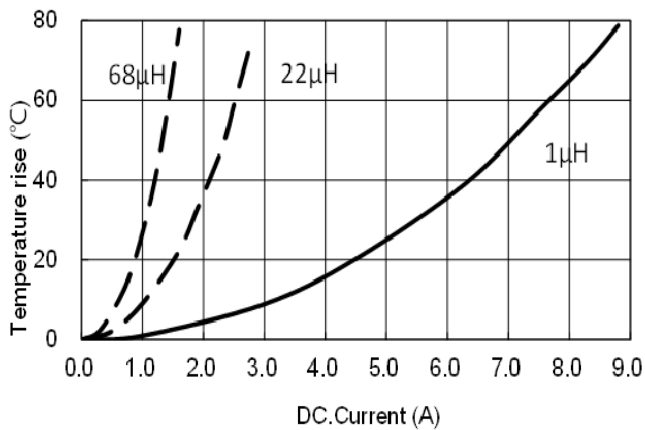


Inductance vs. DC Current Characteristics

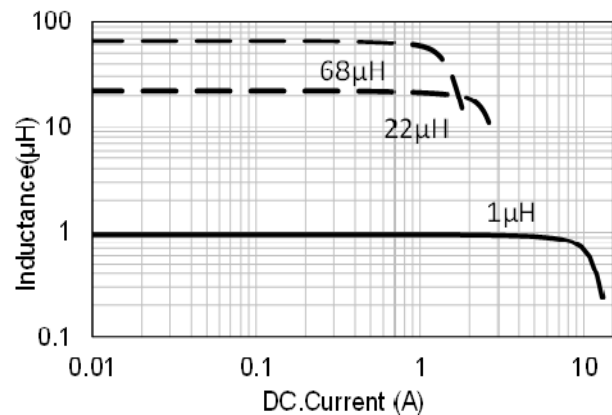


## SWPA6040S Series

Temperature vs. DC Current Characteristics



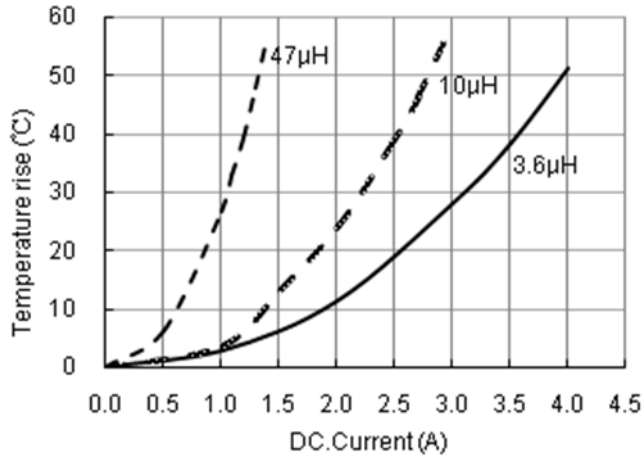
Inductance vs. DC Current Characteristics



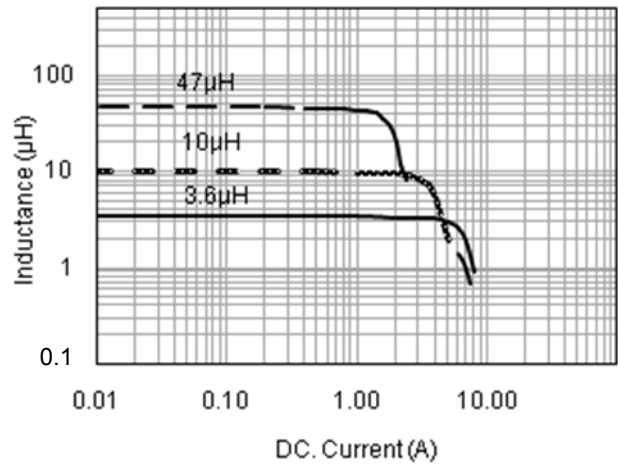
## TYPICAL ELECTRICAL CHARACTERISTICS

### SWPA6045S Series

Temperature vs. DC Current Characteristics

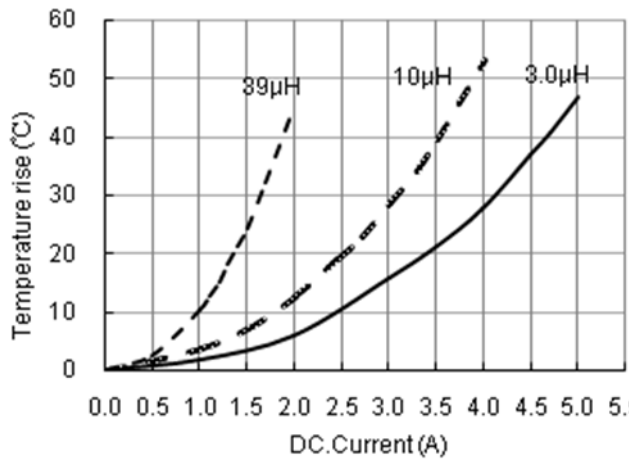


Inductance vs. DC Current Characteristics

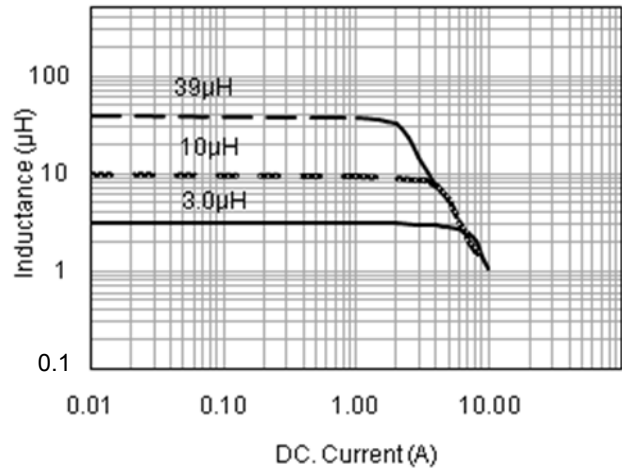


### SWPA8040S Series

Temperature vs. DC Current Characteristics

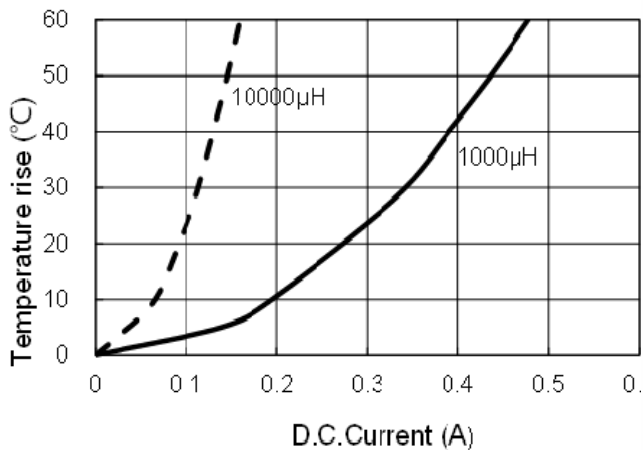


Inductance vs. DC Current Characteristics

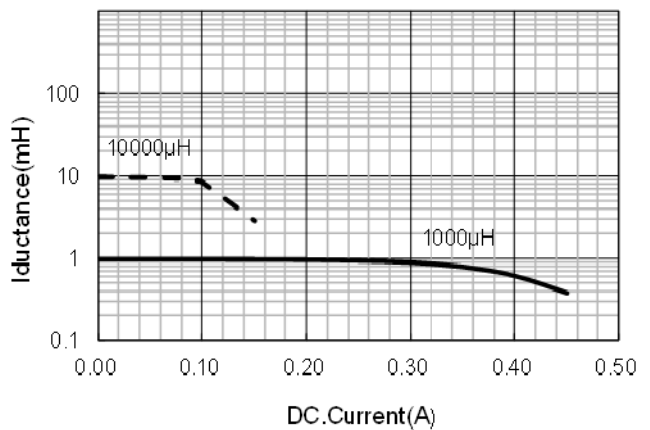


### SWPA8050S Series

Temperature vs. DC Current Characteristics



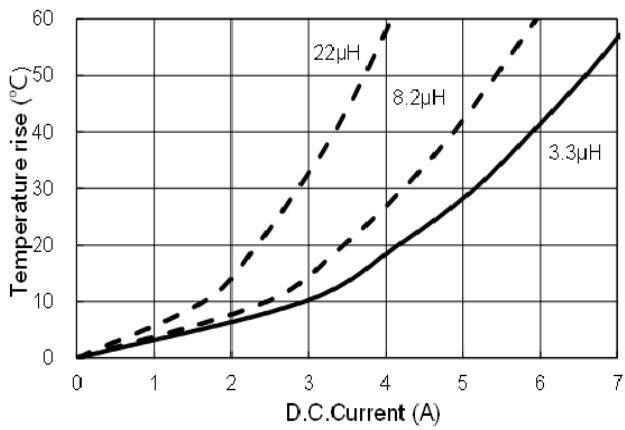
Inductance vs. DC Current Characteristics



# TYPICAL ELECTRICAL CHARACTERISTICS

SWPA8065S Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

