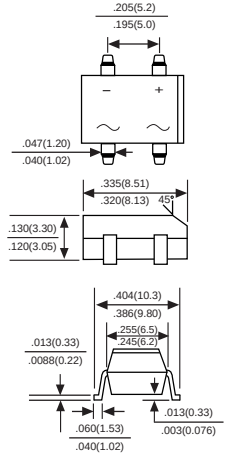
# DB101S THRU DB107S

**SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS**

*Voltage Range - 50 to 1000 Volts  Current - 1.0 Ampere*

## DBS




*Dimensions in inches and (millimeters)*

## FEATURES

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High temperature soldering guaranteed:
- 250*/10 seconds / 0.375"(9.5mm) led length at 5 lbs., (2.3kg)tension
- Small size, simple installation Leads solderable per MIL-STD-202, Method 208
- High surge current capability

## MECHANICAL DATA

**Case**: Molded plastic body
**Terminals**: Plated leads solderable per MIL-STD-750, Method 2026
**Polarity**: Polarity symbols marked on case
**Mounting Position**: Any
**Weight**:0.02 ounce, 0.4 grams

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25* ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load, For capacitive load derate current by 20%.

| Catalog Number | *SYMBOLS* | DB101S | DB102S | DB103S | DB104S | DB105S | DB106S | DB107S | UNITS |
|---|---|---|---|---|---|---|---|---|---|
| Maximum repetitive peak reverse voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum RMS voltage | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | VOLTS |
| Maximum DC blocking voltage | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum average forward rectified current at $T_A$=40* | $I_{F(AV)}$ | 1.0 | | | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$ | 50 | | | | | | | Amps |
| Maximum instantaneous forward voltage drop per birdge element at 1.0A | $V_F$ | 1.1 | | | | | | | Volts |
| Maximum DC reverse current $T_A$=25* | $I_R$ | 10 | | | | | | | µA |
| at rated DC blocking voltage $T_A$=125* | | 500 | | | | | | | µA |
| Operating temperature range | $T_J$ | -55 to +150 | | | | | | | °C |
| storage temperature range | $T_{STG}$ | -55 to +150 | | | | | | | °C |

NOTES:DBS for surface mount package.

# RATINGS AND CHARACTERISTIC CURVES DB101S THRU DB107S

FIG. 1- MAXIMUN DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

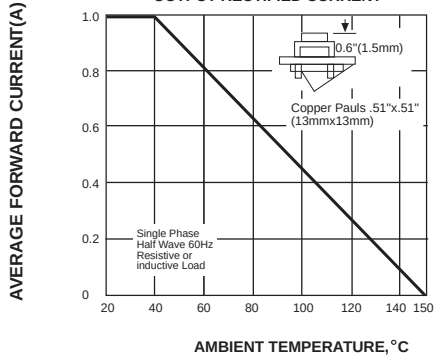



FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

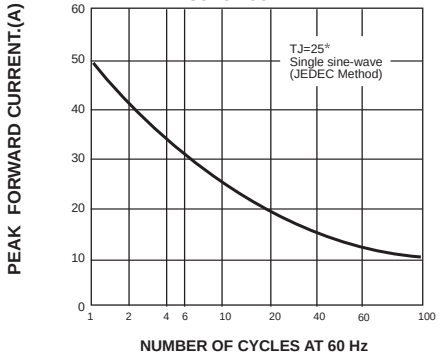



FIG. 3-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

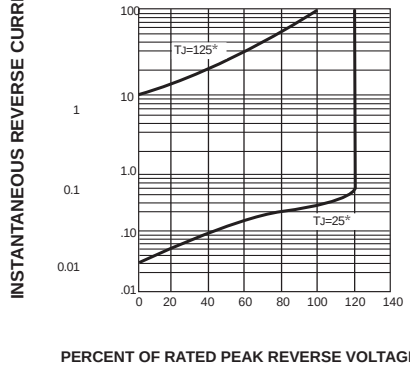



FIG. 4-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMNT

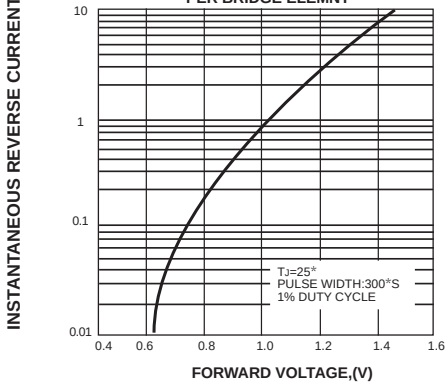



FIG. 3-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT