



Product Series Code	<b>GTH</b>	Brand	<b>GOTREND</b>
File Version	GTH-V5R3	Editor	Teddy
Established Date	2009.07.30	Description	<b>High Frequency Wound Inductor</b>
Latest Edit Date	2015.04.20	Pages	Page : 2

### Features & Application :

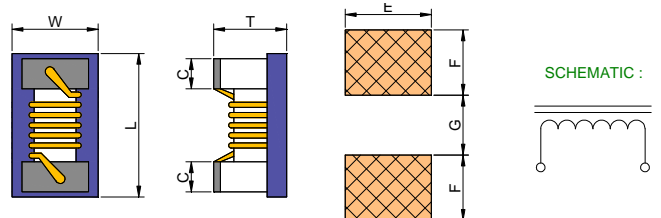
- \* Ceramic construction for high Q, high frequency characteristic
- \* Fit for power line & signal line circuit
- \* To help you go pass the CE/FCC standard.
- \* Mobile Device / Handheld Device / LowProfile Device / Panel...

### Part No Example :

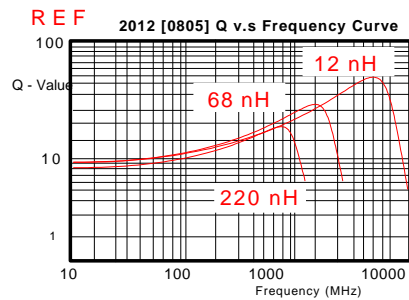
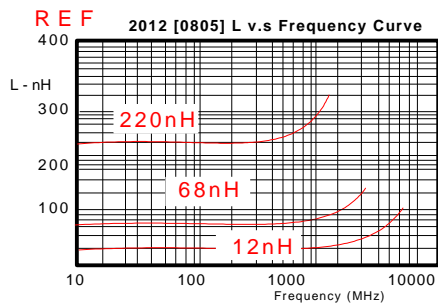
- GTH 2520 P □ - 6R8 □**
1. GOTREND Series : GTH
  2. Dimension Code : 2520 [ 2.5 x 2.0 mm ]
  3. P = Pb < 1000 ppm
  4. [ C ] [ D ] [ E ] [ S ] Color Dot Marking  
[ A ] 1005 Size High Current Type
  5. [ L ] Value : Inductance 6R8 = 6.8uH
  6. Tolerance : G = 2% , J = 5% , K = 10%

### Product Structure :

SMD	DIP	Shield	Unshield		
<b>2005 RoHS Compliant - SGS Certified Result</b>					
鉛 Pb	鎘 Cd	汞 Hg	六價鉻 Cr+6	溴化聯苯 PBB	溴化聯苯 醚PBDE
<1000ppm	ND	ND	ND	ND	ND



TYPE	L [Max.]	W [Max.]	T [Max.]	C [Ref.]	E [Ref.]	F [Ref.]	G [Ref.]
GTH1005P [0402]	1.27	0.76	0.66	0.23	0.66	0.50	0.46
GTH1608P [0603]	1.80	1.12	1.02	0.38	1.02	0.64	0.64
GTH2012P [0805]	2.29	1.73	1.52	0.51	1.55	1.02	0.64



### Test Equipment :

- \* HP4284A , HP42841A - L , IDC , Q , RDC
- \* HP8753D NETWORK ANALYZER - SRF

### Standard Atmospheric Conditions :

- Ambient Temp : 20 +/- 15°C
- Relative Humidity : 65 +/- 20%
- If there may be any doubt on the result, measurement shall be made within the following limits :
- Ambient Temp : 25 +/- 5°C
- Relative Humidity : 75 +/- 10%

### Operating & Storage Condition :

- OPERATING TEMP : -40 ~ +85°C
- STORAGE TEMP : -40 ~ +85°C
- STORAGE LIFE TIME : 6 MONTH @25°C , RH 65%

### Attention & Caution :

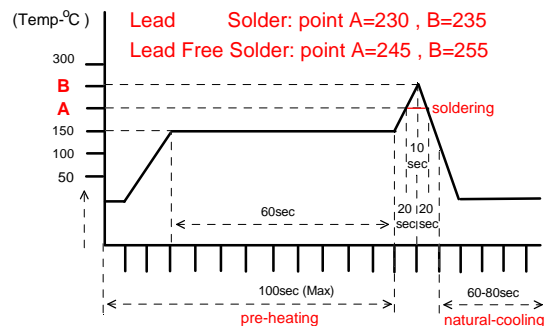
- Please avoid following matters :
- \* Splashing water or salt water
- \* Toxic Gas ( Hydrogen sulfide, Sulfurous acid, Chlorine, Ammonia )
- \* Vibrations or shocks which exceed the specified condition
- \* Dew condenses
- \* Please be careful for the stress to this product by board flexure or something after the mounting.

### Marking Expression : 2520 / ( 2012 & 1608 : 3rd Dot only )

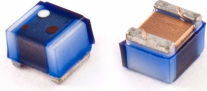
1 ●	2 ●	3 ●	0	1	2	3	4	5	6	7	8	9
			黑	棕	紅	橙	黃	綠	藍	紫	灰	白

料號色碼依下列算法計之.....  
 For inductance meaning:  
 [(1st. dot x10)+2nd. dot ] x 10<sup>3rd. dot</sup> = nH  
 For example:  
 GTH-2520S-220J Color Dot = 紅 1st. 紅 2nd. 橙 3rd.  
 Inductance = [ (<紅 2> x 10) + <紅 2> ] x 10 <橙 3>  
 = 22 x 1000 = 22000 nH  
 22000nH ÷ 1000 = 22uH

### Recommand Reflow Curve (TIME:Second)



Notice: Iron Soldering: 3 Seconds Max. @260°C



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Part No.	Inductance (nH)	L-Test Freq. (MHz)	S.R.F (MHz) min.	DCR (Ohm) max.	IDC (mA) max.
GTH1005PA-20N□	20.0	7.9	2600	0.050	1600
GTH1005PA-22N□	22.0	7.9	2500	0.065	1300
GTH1005PA-33N□	33.0	7.9	2300	0.060	1400
GTH1005PA-36N□	36.0	7.9	2300	0.075	1300
GTH1005PA-39N□	39.0	7.9	2200	0.115	830
GTH1005PA-51N□	51.0	7.9	1930	0.070	1100
GTH1005PA-56N□	56.0	7.9	1900	0.095	1000
GTH1005PA-72N□	72.0	7.9	1650	0.100	1000
GTH1005PA-78N□	78.0	7.9	1600	0.130	970
GTH1005PA-R10□	100.0	7.9	1400	0.160	900
GTH1005PA-R14□	140.0	7.9	1220	0.260	630
GTH1005PA-R18□	180.0	7.9	1150	0.280	560
GTH1005PA-R20□	200.0	7.9	1000	0.440	400
GTH1005PA-R22□	220.0	7.9	1150	0.530	380
GTH1005PA-R25□	250.0	7.9	900	0.360	520
GTH1005PA-R27□	270.0	7.9	860	0.550	360
GTH1005PA-R30□	300.0	7.9	840	0.410	420
GTH1005PA-R33□	330.0	7.9	820	0.560	350
GTH1005PA-R36□	360.0	7.9	810	0.575	360
GTH1005PA-R39□	390.0	7.9	760	0.750	300
GTH1005PA-R42□	420.0	7.9	700	0.700	340
GTH1005PA-R47□	470.0	7.9	650	0.730	310
GTH1005PA-R56□	560.0	7.9	600	0.920	200

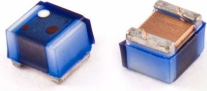
\* Tolerance : J ( 5% ) , K ( 10% )



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Part No.	Inductance (nH)	L-Test Freq. (MHz)	Q @250MHz min.	S.R.F (MHz) min.	DCR (Ohm) max.	IDC (mA) max.	900MHz		1.7GHz	
							L typ.	Q typ.	L typ.	Q typ.
GTH1005P□-1N0□	1.0	250	16	12700	0.045	1360	1.02	77	1.02	69
GTH1005P□-1N5□	1.5	250	14	10000	0.100	300	x	x	x	x
GTH1005P□-1N9□	1.9	250	16	11300	0.070	1040	1.72	68	1.74	82
GTH1005P□-2N0□	2.0	250	16	11100	0.070	1040	1.93	54	1.93	75
GTH1005P□-2N2□	2.2	250	19	10800	0.070	960	2.19	59	2.23	100
GTH1005P□-2N4□	2.4	250	15	10500	0.070	790	2.24	51	2.27	68
GTH1005P□-2N7□	2.7	250	16	10400	0.120	640	2.23	42	2.25	61
GTH1005P□-3N3□	3.3	250	19	7000	0.066	840	3.10	65	3.12	87
GTH1005P□-3N6□	3.6	250	19	6800	0.066	840	3.56	45	3.62	71
GTH1005P□-3N9□	3.9	250	19	5800	0.066	840	3.89	50	4.00	75
GTH1005P□-4N3□	4.3	250	18	6000	0.091	700	4.19	47	4.30	71
GTH1005P□-4N7□	4.7	250	15	4700	0.130	640	4.55	48	4.68	68
GTH1005P□-5N1□	5.1	250	20	4800	0.083	800	5.15	56	5.25	82
GTH1005P□-5N6□	5.6	250	20	4800	0.083	760	5.16	54	5.28	81
GTH1005P□-6N2□	6.2	250	20	4800	0.083	760	6.16	52	6.37	76
GTH1005P□-6N8□	6.8	250	20	4800	0.083	680	6.56	63	6.93	78
GTH1005P□-7N5□	7.5	250	22	4800	0.104	680	7.91	60	8.22	88
GTH1005P□-8N2□	8.2	250	22	4400	0.104	680	8.50	57	8.85	84
GTH1005P□-8N7□	8.7	250	18	4100	0.200	480	8.78	54	9.21	73
GTH1005P□-9N0□	9.0	250	22	4160	0.104	680	9.07	62	9.53	78
GTH1005P□-9N5□	9.5	250	18	4000	0.200	480	9.42	54	9.98	69
GTH1005P□-10N□	10.0	250	21	3900	0.195	480	9.80	50	10.10	67
GTH1005P□-11N□	11.0	250	24	3680	0.120	640	10.70	52	11.20	78
GTH1005P□-12N□	12.0	250	24	3600	0.120	640	11.90	53	12.70	71
GTH1005P□-13N□	13.0	250	24	3450	0.210	440	13.40	51	14.60	51
GTH1005P□-15N□	15.0	250	24	3280	0.172	560	14.60	55	15.50	77
GTH1005P□-16N□	16.0	250	24	3100	0.220	560	16.60	46	18.80	47
GTH1005P□-18N□	18.0	250	24	3100	0.230	420	18.30	57	20.28	62
GTH1005P□-19N□	19.0	250	24	3040	0.202	480	19.10	50	21.10	67
GTH1005P□-20N□	20.0	250	25	3000	0.250	420	20.70	52	23.70	53
GTH1005P□-22N□	22.0	250	25	2800	0.300	400	23.20	53	26.80	53
GTH1005P□-23N□	23.0	250	22	2720	0.300	400	23.80	49	26.90	64
GTH1005P□-24N□	24.0	250	25	2700	0.300	400	25.10	51	29.50	50
GTH1005P□-27N□	27.0	250	24	2480	0.300	400	28.70	49	33.50	63
GTH1005P□-30N□	30.0	250	25	2350	0.350	400	31.10	46	38.50	39
GTH1005P□-33N□	33.0	250	24	2350	0.350	400	34.90	31	41.74	32
GTH1005P□-36N□	36.0	250	24	2320	0.440	320	39.50	44	48.40	53
GTH1005P□-39N□	39.0	250	25	2100	0.550	200	41.70	47	50.23	45
GTH1005P□-40N□	40.0	250	24	2240	0.440	320	39.00	44	47.40	33
GTH1005P□-43N□	43.0	250	25	2030	0.810	100	45.80	46	61.55	34
GTH1005P□-47N□	47.0	250	20	2100	0.830	150	50.00	38	x	x
GTH1005P□-51N□	51.0	250	25	1750	0.820	100	x	x	x	x
GTH1005P□-56N□	56.0	250	22	1760	0.970	100	x	x	x	x
GTH1005P□-68N□	68.0	250	22	1620	1.120	100	x	x	x	x
GTH1005P□-R12□	120.0	250	20	>1800	2.660	50	x	x	x	x

\* Tolerance : G ( 2% ) , J ( 5% ) , K ( 10% )



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Part No.	Inductance (nH)	L-Test Freq. (MHz)	Q @250MHz min.	S.R.F (MHz) min.	DCR (Ohm) max.	IDC (mA) max.	900MHz		1.7GHz		E TYPE COLOR COATING
							L typ.	Q typ.	L typ.	Q typ.	
GTH1608P□-1N6J	1.60 ± 5%	250	16	12500	0.040	700	1.53	35	1.58	55	Red
GTH1608P□-1N8J	1.80 ± 5%	250	16	12500	0.045	700	1.63	35	1.66	50	Black
GTH1608P□-2N2J	2.20 ± 5%	250	15	6000	0.100	700	2.18	41	2.20	64	Yellow
GTH1608P□-2N3J	2.30 ± 5%	250	16	4000	0.140	700	2.32	32	2.35	40	None
GTH1608P□-3N3J	3.30 ± 5%	250	30	5900	0.045	700	3.42	73	3.46	95	Blue
GTH1608P□-3N6J	3.60 ± 5%	250	22	5800	0.063	700	3.53	49	3.58	65	Red
GTH1608P□-3N9J	3.90 ± 5%	250	22	6000	0.080	700	3.95	49	3.96	67	Brown
GTH1608P□-4N3J	4.30 ± 5%	250	22	5800	0.063	700	4.32	49	4.43	67	Orange
GTH1608P□-4N7J	4.70 ± 5%	250	20	5800	0.120	700	4.65	53	4.80	67	Violet
GTH1608P□-5N1J	5.10 ± 5%	250	20	5700	0.120	700	5.13	47	5.36	56	Green
GTH1608P□-5N6J	5.60 ± 5%	250	20	5800	0.170	700	5.53	56	5.86	77	Black
GTH1608P□-6N3J	6.30 ± 5%	250	20	5700	0.120	700	5.50	47	6.10	60	White
GTH1608P□-6N8J	6.80 ± 5%	250	27	5800	0.130	700	6.75	60	7.10	81	Red
GTH1608P□-7N5J	7.50 ± 5%	250	27	4800	0.120	700	7.39	62	7.71	81	Brown
GTH1608P□-8N2J	8.20 ± 5%	250	27	4700	0.130	700	8.25	64	8.40	87	Orange
GTH1608P□-8N7J	8.70 ± 5%	250	27	4600	0.110	700	8.84	62	9.38	58	Yellow
GTH1608P□-9N1J	9.10 ± 5%	250	28	4600	0.120	700	9.21	62	9.77	75	Black
GTH1608P□-9N5J	9.50 ± 5%	250	27	5400	0.150	700	9.64	59	9.38	61	Blue
GTH1608P□-10N1J	10.00 ± 5%	250	31	4800	0.150	700	10.00	66	10.50	83	Orange
GTH1608P□-11N1J	11.00 ± 5%	250	30	4000	0.150	700	11.30	53	12.10	56	Gray
GTH1608P□-12N1J	12.00 ± 5%	250	35	4000	0.150	700	12.30	72	13.50	83	Yellow
GTH1608P□-15N1J	15.00 ± 5%	250	35	4000	0.180	700	15.40	64	16.80	89	Green
GTH1608P□-16N1J	16.00 ± 5%	250	34	3300	0.170	700	16.50	55	18.00	52	White
GTH1608P□-18N1J	18.00 ± 5%	250	35	3100	0.180	700	18.70	70	21.40	69	Blue
GTH1608P□-19N1J	19.00 ± 5%	250	35	3000	0.190	700	19.71	73	23.35	62	Brown
GTH1608P□-20N1J	20.00 ± 5%	250	38	3000	0.180	700	20.50	79	23.27	86	Red
GTH1608P□-22N1J	22.00 ± 5%	250	38	3000	0.210	700	22.80	73	26.10	71	Violet
GTH1608P□-23N1J	23.00 ± 5%	250	38	2850	0.205	700	24.19	70	28.48	72	Orange
GTH1608P□-24N1J	24.00 ± 5%	250	36	2650	0.210	700	24.10	45	28.00	40	Black
GTH1608P□-25N1J	25.00 ± 5%	250	38	2800	0.210	600	25.93	84	29.73	89	Yellow
GTH1608P□-27N1J	27.00 ± 5%	250	40	2800	0.220	600	29.20	74	34.60	65	Gray
GTH1608P□-30N1J	30.00 ± 5%	250	37	2250	0.220	600	31.40	47	39.80	28	Brown
GTH1608P□-33N1J	33.00 ± 5%	250	40	2300	0.240	600	36.00	67	49.50	42	White
GTH1608P□-36N1J	36.00 ± 5%	250	37	2080	0.250	600	39.10	47	48.90	24	Red
GTH1608P□-39N1J	39.00 ± 5%	250	40	2200	0.260	600	42.70	60	60.20	40	Black
GTH1608P□-43N1J	43.00 ± 5%	200	38	2000	0.280	600	46.90	44	60.30	21	Orange
GTH1608P□-47N1J	47.00 ± 5%	200	38	2000	0.280	600	52.20	62	77.20	35	Brown
GTH1608P□-51N1J	51.00 ± 5%	200	38	2130	0.300	600	59.27	50	103.8	23	Violet
GTH1608P□-56N1J	56.00 ± 5%	200	38	1900	0.310	600	62.50	56	97.00	26	Red
GTH1608P□-62N1J	62.00 ± 5%	200	37	1800	0.330	600	73.30	42	156.5	16	Gray
GTH1608P□-68N1J	68.00 ± 5%	200	37	1700	0.340	600	80.50	54	168.0	21	Orange
GTH1608P□-72N1J	72.00 ± 5%	150	34	1700	0.490	400	82.00	53	135.0	20	Yellow
GTH1608P□-82N1J	82.00 ± 5%	150	34	1700	0.540	400	96.20	54	177.0	21	Green
GTH1608P□-91N1J	91.00 ± 5%	150	34	1500	0.560	400	111.80	49	X	X	Brown
GTH1608P□-R10J	100.00 ± 5%	150	34	1400	0.580	400	124.00	49	X	X	Blue
GTH1608P□-R11J	110.00 ± 5%	150	32	1350	0.610	300	138.00	43	X	X	Violet
GTH1608P□-R12J	120.00 ± 5%	150	32	1300	0.650	300	166.00	39	X	X	Gray
GTH1608P□-R13J	130.00 ± 5%	150	32	1200	0.750	280	180.10	36	X	X	Orange
GTH1608P□-R15J	150.00 ± 5%	150	32	1300	0.950	280	230.00	25	X	X	White
GTH1608P□-R17J	170.00 ± 5%	100	25	990	1.150	240	228.40	34	X	X	Yellow
GTH1608P□-R18J	180.00 ± 5%	100	25	1250	1.400	250	305.00	22	X	X	Black
GTH1608P□-R19J	190.00 ± 5%	100	25	990	1.350	200	279.10	30	X	X	Green
GTH1608P□-R20J	200.00 ± 5%	100	25	990	1.500	200	X	X	X	X	Orange
GTH1608P□-R22J	220.00 ± 5%	100	25	900	1.600	250	480.00	8	X	X	Brown
GTH1608P□-R24J	240.00 ± 5%	100	25	900	1.900	200	X	X	X	X	Violet
GTH1608P□-R27J	270.00 ± 5%	100	25	900	2.100	200	980.00	4	X	X	Red
GTH1608P□-R33J	330.00 ± 5%	100	25	900	2.750	100	970.6	9	X	X	Blue
GTH1608P□-R34J	340.00 ± 5%	100	25	900	2.900	100	X	X	X	X	Gray
GTH1608P□-R39J	390.00 ± 5%	100	25	900	4.350	100	734.5	29	X	X	Yellow
GTH1608P□-R47J	470.00 ± 5%	100	25	750	4.000	80	X	X	X	X	Green
GTH1608P□-1R0J	1000.00 ± 5%	7.96	16@7.96M	190	1.200	300	x	x	X	X	None

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Part No.	Inductance (nH)	L-Test Freq. (MHz)	Q min.	S.R.F (MHz) min.	DCR (Ohm) max.	IDC (mA) max.	S TYPE COLOR COATING
GTH1608PS-1N6J	1.60 ± 5%	250	24	12500	0.030	700	Black
GTH1608PS-1N8J	1.80 ± 5%	250	16	12500	0.045	700	Brown
GTH1608PS-2N2J	2.20 ± 5%	100	20	5800	0.050	700	Orange
GTH1608PS-3N3J	3.30 ± 5%	250	20	5500	0.070	700	Violet
GTH1608PS-3N6J	3.60 ± 5%	250	22	5900	0.063	700	Red
GTH1608PS-3N9J	3.90 ± 5%	250	22	5900	0.080	700	Orange
GTH1608PS-4N3J	4.30 ± 5%	250	22	5900	0.063	700	Yellow
GTH1608PS-4N7J	4.70 ± 5%	250	20	5800	0.116	700	Green
GTH1608PS-5N1J	5.10 ± 5%	250	20	5700	0.140	700	Blue
GTH1608PS-5N6G	5.60 ± 2%	250	20	5800	0.150	700	Gray
GTH1608PS-6N1G	6.10 ± 2%	250	25	5800	0.110	700	White
GTH1608PS-6N8G	6.80 ± 2%	250	27	5800	0.110	700	Violet
GTH1608PS-7N5G	7.50 ± 2%	250	28	4800	0.106	700	Gray
GTH1608PS-8N2G	8.20 ± 2%	250	25	5800	0.120	700	Black
GTH1608PS-8N4G	8.40 ± 2%	250	28	4600	0.109	700	Red
GTH1608PS-8N5G	8.50 ± 2%	250	28	4600	0.109	700	Red
GTH1608PS-8N7G	8.70 ± 2%	250	28	4600	0.109	700	White
GTH1608PS-9N5G	9.50 ± 2%	250	28	5400	0.135	700	Black
GTH1608PS-10NG	10.00 ± 2%	250	31	4800	0.130	700	Brown
GTH1608PS-11NG	11.00 ± 2%	250	33	4000	0.086	700	Red
GTH1608PS-12NG	12.00 ± 2%	250	35	4000	0.130	700	Orange
GTH1608PS-14NG	14.00 ± 2%	250	35	4000	0.170	700	Brown
GTH1608PS-15NG	15.00 ± 2%	250	35	4000	0.170	700	Yellow
GTH1608PS-16NG	16.00 ± 2%	250	34	3300	0.104	700	Green
GTH1608PS-18NG	18.00 ± 2%	250	35	3100	0.170	700	Blue
GTH1608PS-22NG	22.00 ± 2%	250	38	3000	0.190	700	Violet
GTH1608PS-24NG	24.00 ± 2%	250	37	2650	0.135	700	Gray
GTH1608PS-27NG	27.00 ± 2%	250	40	2800	0.220	600	White
GTH1608PS-30NG	30.00 ± 2%	250	37	2250	0.144	600	Black
GTH1608PS-33NG	33.00 ± 2%	250	40	2300	0.220	600	Brown
GTH1608PS-36NG	36.00 ± 2%	250	38	2080	0.250	600	Red
GTH1608PS-39NG	39.00 ± 2%	250	40	2200	0.250	600	Orange
GTH1608PS-43NG	43.00 ± 2%	250	39	2000	0.280	600	Yellow
GTH1608PS-47NG	47.00 ± 2%	200	38	2000	0.280	600	Green
GTH1608PS-56NG	56.00 ± 2%	200	38	1900	0.310	600	Blue
GTH1608PS-68NG	68.00 ± 2%	200	37	1700	0.340	600	Violet
GTH1608PS-72NG	72.00 ± 2%	150	34	1700	0.490	400	Gray
GTH1608PS-82NG	82.00 ± 2%	150	34	1700	0.540	400	White
GTH1608PS-91NG	91.00 ± 2%	150	34	1700	0.560	400	Violet
GTH1608PS-R10G	100.00 ± 2%	150	34	1400	0.580	400	Black
GTH1608PS-R11G	110.00 ± 2%	150	32	1350	0.610	300	Brown
GTH1608PS-R12G	120.00 ± 2%	150	32	1300	0.650	300	Red
GTH1608PS-R15G	150.00 ± 2%	150	28	990	0.920	280	Orange
GTH1608PS-R18G	180.00 ± 2%	100	25	990	1.250	240	Yellow
GTH1608PS-R20G	200.00 ± 2%	100	25	1200	1.500	250	Blue
GTH1608PS-R22G	220.00 ± 2%	100	25	900	1.900	200	Green
GTH1608PS-R27G	270.00 ± 2%	100	24	900	2.300	170	Blue
GTH1608PS-R33G	330.00 ± 2%	100	24	900	3.900	1850	Violet
GTH1608PS-R39G	390.00 ± 2%	100	25	900	4.350	100	Gray
GTH1608PS-R47G	470.00 ± 2%	100	25	600	4.350	100	White

\* Tolerance : G ( 2% ) , J ( 5% ) , K ( 10% )



Product Series Code	<b>GTH</b>	Brand	<b>GOTREND</b>
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Part NO.	Inductance (nH)	L-Test Freq. (MHz)	Q min.	Q-Test Freq. (MHz)	S.R.F (MHz) min.	DCR (Ohm) max.	IDC (mA) max.	E TYPE COLOR COATING
GTH2012P□-2N8J	2.8 ± 5%	250	55	1500	7900	0.06	800	Gray
GTH2012P□-3N0J	3.0 ± 5%	250	55	1500	7900	0.08	800	White
GTH2012P□-3N3J	3.3 ± 5%	250	45	1500	7900	0.12	600	Black
GTH2012P□-5N1J	5.1 ± 5%	250	60	1000	5800	0.06	600	Yellow
GTH2012P□-5N6J	5.6 ± 5%	250	65	1000	5500	0.08	600	Orange
GTH2012P□-6N2J	6.2 ± 5%	250	50	1000	5500	0.11	600	Violet
GTH2012P□-6N8J	6.8 ± 5%	250	50	1000	5500	0.11	600	Brown
GTH2012P□-7N5J	7.5 ± 5%	250	50	1000	4500	0.14	600	Green
GTH2012P□-8N2J	8.2 ± 5%	250	50	1000	4700	0.12	600	Red
GTH2012P□-10NJ	10.0 ± 5%	250	60	1000	4200	0.10	600	Blue
GTH2012P□-12NJ	12.0 ± 5%	250	50	500	4000	0.15	600	Orange
GTH2012P□-15NJ	15.0 ± 5%	250	50	500	3400	0.17	600	Yellow
GTH2012P□-18NJ	18.0 ± 5%	250	50	500	3300	0.20	600	Green
GTH2012P□-22NJ	22.0 ± 5%	250	55	500	2600	0.22	500	Blue
GTH2012P□-24NJ	24.0 ± 5%	250	50	500	2000	0.22	500	Gray
GTH2012P□-27NJ	27.0 ± 2%	250	55	500	2500	0.25	500	Violet
GTH2012P□-33NJ	33.0 ± 5%	250	60	500	2050	0.27	500	Gray
GTH2012P□-36NJ	36.0 ± 5%	250	55	500	1700	0.27	500	Orange
GTH2012P□-39NJ	39.0 ± 5%	250	60	500	2000	0.29	500	White
GTH2012P□-43NJ	43.0 ± 5%	200	60	500	1650	0.34	500	Yellow
GTH2012P□-47NJ	47.0 ± 5%	200	60	500	1650	0.31	500	Black
GTH2012P□-56NJ	56.0 ± 5%	200	60	500	1550	0.34	500	Brown
GTH2012P□-68NJ	68.0 ± 2%	200	60	500	1450	0.38	500	Red
GTH2012P□-75NJ	75.0 ± 5%	200	60	500	1400	0.40	400	Violet
GTH2012P□-82NJ	82.0 ± 2%	150	65	500	1300	0.42	400	Orange
GTH2012P□-91NJ	91.0 ± 5%	150	65	500	1200	0.48	400	Black
GTH2012P□-R10J	100.0 ± 5%	150	65	500	1200	0.46	400	Yellow
GTH2012P□-R11J	110.0 ± 5%	150	50	250	1000	0.48	400	Brown
GTH2012P□-R12J	120.0 ± 2%	150	50	250	1100	0.51	400	Green
GTH2012P□-R15J	150.0 ± 5%	100	50	250	920	0.56	400	Blue
GTH2012P□-R16J	160.0 ± 5%	100	50	250	900	0.60	400	Gray
GTH2012P□-R18J	180.0 ± 5%	100	50	250	870	0.64	400	Violet
GTH2012P□-R20J	200.0 ± 5%	100	50	250	860	0.66	400	Red
GTH2012P□-R22J	220.0 ± 5%	100	50	250	850	0.78	400	Gray
GTH2012P□-R24J	240.0 ± 5%	100	44	250	690	1.00	350	Red
GTH2012P□-R25J	250.0 ± 5%	100	45	250	680	1.00	350	Yellow
GTH2012P□-R27J	270.0 ± 5%	100	48	250	650	1.00	350	White
GTH2012P□-R33J	330.0 ± 5%	100	48	250	600	1.40	310	Black
GTH2012P□-R39J	390.0 ± 5%	100	48	250	560	1.50	290	Brown
GTH2012P□-R47J	470.0 ± 5%	50	33	100	375	1.70	220	Violet
GTH2012P□-R56J	560.0 ± 5%	25	23	50	340	1.90	210	Orange
GTH2012P□-R62J	620.0 ± 5%	25	23	50	220	2.20	210	White
GTH2012P□-R68J	680.0 ± 5%	25	23	50	200	2.20	190	Green
GTH2012P□-R75J	750.0 ± 5%	25	23	50	200	2.30	180	Violet
GTH2012P□-R82J	820.0 ± 5%	25	23	50	200	2.35	180	Blue
GTH2012P□-1R0J	1000.0 ± 5%	25	20	50	100	2.50	170	Violet
GTH2012P□-1R2J	1200.0 ± 5%	7.9	18	25	100	2.50	170	None
GTH2012P□-1R5J	1500.0 ± 5%	7.9	16	25	100	2.50	170	Black
GTH2012P□-1R8J	1800.0 ± 5%	7.9	16	7.9	80	2.50	170	Brown
GTH2012P□-2R2J	2200.0 ± 5%	7.9	16	7.9	60	2.70	160	Red
GTH2012P□-2R7J	2700.0 ± 5%	7.9	16	7.9	50	2.95	150	Orange

\* Tolerance : G ( 2% ) , J ( 5% ) , K ( 10% )





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Part NO.	Inductance (nH)	L-Test Freq. (MHz)	Q min.	Q-Test Freq. (MHz)	S.R.F (MHz) min.	DCR (Ohm) max.	IDC (mA) max.	E TYPE COLOR COATING		
								1st.	2nd.	3rd.
GTH2520P□-10NK	10 ± 10%	50	50	500	4100	0.08	1000	Brown	Black	Black
GTH2520P□-12NK	12 ± 10%	50	50	500	3300	0.09	1000	Brown	Red	Black
GTH2520P□-15NK	15 ± 10%	50	45	500	2500	0.10	1000	Brown	Green	Black
GTH2520P□-18NK	18 ± 10%	50	50	350	2400	0.11	1000	Brown	Gray	Black
GTH2520P□-22NJ	22 ± 5%	50	55	350	2400	0.12	1000	Red	Red	Black
GTH2520P□-27NJ	27 ± 5%	50	55	350	1600	0.13	1000	Red	Violet	Black
GTH2520P□-33NJ	33 ± 5%	50	60	350	1600	0.14	1000	Orange	Orange	Black
GTH2520P□-39NJ	39 ± 5%	50	60	350	1500	0.15	1000	Orange	White	Black
GTH2520P□-47NJ	47 ± 5%	50	65	350	1500	0.16	1000	Yellow	Violet	Black
GTH2520P□-56NJ	56 ± 5%	50	65	350	1300	0.18	1000	Green	Blue	Black
GTH2520P□-68NJ	68 ± 5%	50	65	350	1300	0.20	1000	Blue	Gray	Black
GTH2520P□-82NJ	82 ± 5%	50	60	350	1000	0.22	1000	Gray	Red	Black
GTH2520P□-R10J	100 ± 5%	25	60	350	1000	0.56	650	Brown	Black	Brown
GTH2520P□-R12J	120 ± 5%	25	60	350	950	0.63	650	Brown	Red	Brown
GTH2520P□-R15J	150 ± 5%	25	45	100	850	0.70	580	Brown	Green	Brown
GTH2520P□-R18J	180 ± 5%	25	45	100	750	0.77	620	Brown	Gray	Brown
GTH2520P□-R22J	220 ± 5%	25	45	100	700	0.84	500	Red	Red	Brown
GTH2520P□-R27J	270 ± 5%	25	45	100	600	0.91	500	Red	Violet	Brown
GTH2520P□-R33J	330 ± 5%	25	45	100	570	1.05	450	Orange	Orange	Brown
GTH2520P□-R39J	390 ± 5%	25	45	100	500	1.12	470	Orange	White	Brown
GTH2520P□-R47J	470 ± 5%	25	45	100	450	1.19	470	Yellow	Violet	Brown
GTH2520P□-R56J	560 ± 5%	25	45	100	415	1.33	400	Green	Blue	Brown
GTH2520P□-R62J	620 ± 5%	25	45	100	375	1.40	300	Blue	Red	Brown
GTH2520P□-R68J	680 ± 5%	25	45	100	375	1.47	400	Blue	Gray	Brown
GTH2520P□-R75J	750 ± 5%	25	45	100	360	1.54	360	Violet	Green	Brown
GTH2520P□-R82J	820 ± 5%	25	45	100	350	1.65	400	Gray	Red	Brown
GTH2520P□-R91J	910 ± 5%	25	35	50	320	1.68	380	White	Brown	Brown
GTH2520P□-1R0J	1000 ± 5%	25	35	50	290	1.75	370	Brown	Black	Red
GTH2520P□-1R2J	1200 ± 5%	7.9	35	50	250	2.00	310	Brown	Red	Red
GTH2520P□-1R5J	1500 ± 5%	7.9	28	50	200	2.30	330	Brown	Green	Red
GTH2520P□-1R8J	1800 ± 5%	7.9	28	50	160	2.60	300	Brown	Gray	Red
GTH2520P□-2R2J	2200 ± 5%	7.9	28	50	160	2.80	280	Red	Red	Red
GTH2520P□-2R7J	2700 ± 5%	7.9	22	25	135	3.20	290	Red	Violet	Red
GTH2520P□-3R3J	3300 ± 5%	7.9	22	25	110	3.40	290	Orange	Orange	Red
GTH2520P□-3R9J	3900 ± 5%	7.9	20	25	100	3.60	260	Orange	White	Red
GTH2520P□-4R7J	4700 ± 5%	7.9	20	25	90	4.00	260	Yellow	Violet	Red
GTH2520P□-5R6J	5600 ± 5%	7.9	18	7.9	40	4.20	240	Green	Blue	Red
GTH2520P□-6R8J	6800 ± 5%	7.9	18	7.9	40	4.90	200	Blue	Gray	Red
GTH2520P□-8R2J	8200 ± 5%	7.9	18	7.9	25	6.00	170	Gray	Red	Red
GTH2520P□-100J	10000 ± 5%	7.9	18	7.9	25	8.00	150	Brown	Black	Orange

\* Tolerance : G ( 2% ) , J ( 5% ) , K ( 10% )



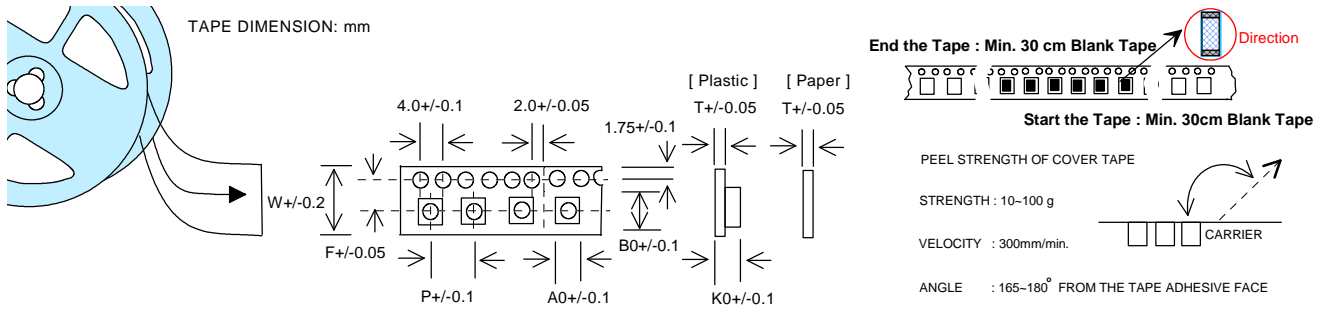
Product Series Code	<b>GTH</b>	Brand	<b>GOTREND</b>
File Version	<b>GTH-V5R3</b>	Editor	<b>Teddy</b>
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Reliability Test Result :																				
NO	ITEM	TEST CONDITIONS			REMARKS															
1	Thermal Shock (Temperature Cycle) 溫度循環試驗	Temperature: -40 °C / +85 °C kept stabilized for 30 minutes each  Cycle: 100 Cycles			Inductance value shall be within $\pm 10\%$ of the initial value. Q-factor shall be within $\pm 30\%$ of the initial value. Impedance shall be within $\pm 20\%$ of the initial value. DCR value shall be within $\pm 20\%$ of the initial value.															
2	Humidity Resistance 耐濕試驗	Humidity: 90%~ 95% RH Temperature: 40 $\pm$ 2 °C Test Time: 1000 $\pm$ 12 Hours			■NO.1~4 Measurement: After placing for 24 hours (min.)															
3	High Temperature 耐熱試驗	Temperature: 85 $\pm$ 2 °C Humidity: 20% Testing Time: 1000 $\pm$ 12 Hours			■NO.2~3 Applied current(spec): Rated current(maximum value)															
4	Low Temperature 耐寒試驗	Temperature: -40 $\pm$ 2 °C Time: 1000 $\pm$ 12 Hours			■NO.5 Cycle: 5 cycles															
5	Temperature and Humidity Cycle 溫/濕度循環試驗	<table border="1"> <thead> <tr> <th>Step</th> <th>Temp</th> <th>Humidity</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>25<math>\pm</math> 2 °C</td> <td>95~100%RH</td> <td>3.0Hr</td> </tr> <tr> <td>2</td> <td>55<math>\pm</math> 2 °C</td> <td>95~96%RH</td> <td>9.5Hr</td> </tr> <tr> <td>3</td> <td>25<math>\pm</math> 2 °C</td> <td>95~100%RH</td> <td>9.5Hr</td> </tr> </tbody> </table>	Step	Temp		Humidity	Time	1	25 $\pm$ 2 °C	95~100%RH	3.0Hr	2	55 $\pm$ 2 °C	95~96%RH	9.5Hr	3	25 $\pm$ 2 °C	95~100%RH	9.5Hr	
Step	Temp	Humidity	Time																	
1	25 $\pm$ 2 °C	95~100%RH	3.0Hr																	
2	55 $\pm$ 2 °C	95~96%RH	9.5Hr																	
3	25 $\pm$ 2 °C	95~100%RH	9.5Hr																	
6	Vibration 振動性試驗	Frequency: 10Hz~55Hz Amplitude: 1.5mm Direction: X,Y,Z Time: 2 Hours each																		
7	IR Reflow Soldering 焊錫性試驗	Solder: H63A(eutectic solder) Solder Temp.: 230 $\pm$ 5 °C Time: 6 minutes Cycles: x 1			Impedance(inductance) shall be within $\pm 20\%$ of the initial value. DCR value shall be within $\pm 20\%$ of the initial value.															
8	Soldering Heat Resistance 耐熱 焊性試驗	Preheat: 120 ~ 150 °C (60 sec) Solder:H63A(eutectic solder) Solder Temp.: 260 $\pm$ 5 °C Flux: Rosin Dip time: 10 $\pm$ 1 seconds			The chip must have no cracks. More than 75% of the terminal electrode must be covered with solder.															
9	Bending Strength 折斷力試驗				The terminal electrode and the ferrite must not be damaged by the forces applied on the test conditions.  1608: $\geq 3.0$ kg 2012: $\geq 3.5$ kg 2520: $\geq 4.0$ kg															
10	Flexure Strength 彎曲試驗				No mechanical damage shall be noticed even when the board is bent 2 mm															
11	Terminal Strength 拉力試驗				After solder between copper plate and terminals of coil, push in two directions of X,Y with 2.0kg must no crack !															



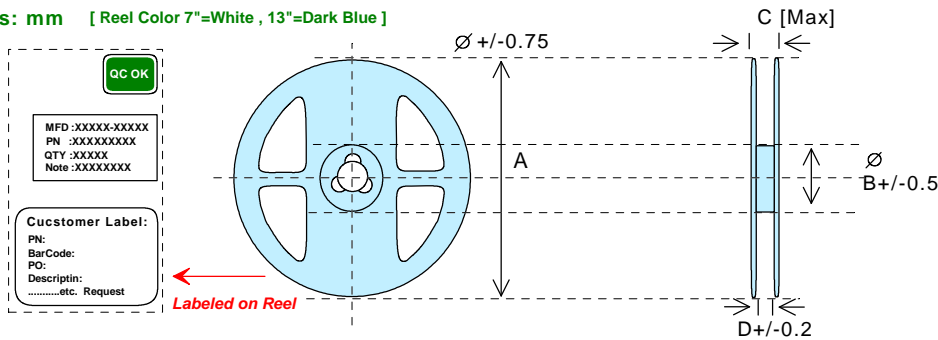


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SIZE/mm	W	P	A <sub>0</sub>	B <sub>0</sub>	K <sub>0</sub>	T	F
<b>1005</b>	8.00	2.00	0.71	1.16	0.65	0.23	3.50
<b>1608</b>	8.00	4.00	1.20	1.85	1.00	0.23	3.50
<b>2012</b>	8.00	4.00	1.85	2.30	1.45	0.23	3.50
<b>2520</b>	8.00	4.00	2.50	2.80	2.00	0.23	3.50

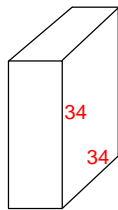
Reel Dimensions: mm [ Reel Color 7"=White , 13"=Dark Blue ]



SIZE / mm	A	B	C	D	REEL SIZE	QTY/REEL
<b>1005</b>	180	60	14.4	8.4	7"	4.0K
<b>1608</b>	180	60	14.4	8.4	7"	4.0K
<b>2012</b>	180	60	14.4	8.4	7"	2.0K
<b>2520</b>	180	60	14.4	8.4	7"	2.0K

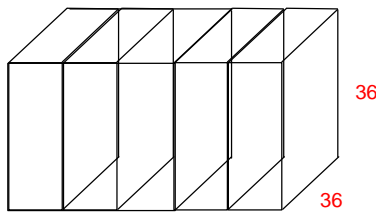
BOX Package: Unit: cm

5 Reel in



Inner Small Box

5 Inner Small Box in



Outer Large Box