

| | | | | |
|---|---------------------|-------------------|-------------|------------------------------------|
|  | Product Series Code | GBL | Brand | GOTREND |
| | File Version | GBL-V3R0 | Editor | Teddy |
| | Established Date | 1997.09.28 | Description | Multilayer Ferrite Chip Ind |
| | Latest Edit Date | 2014.09.10 | Pages | Page : 2 |

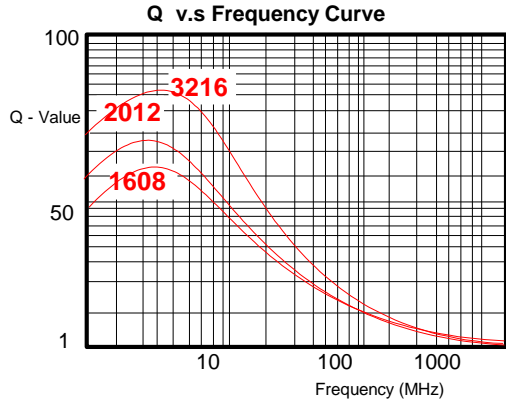
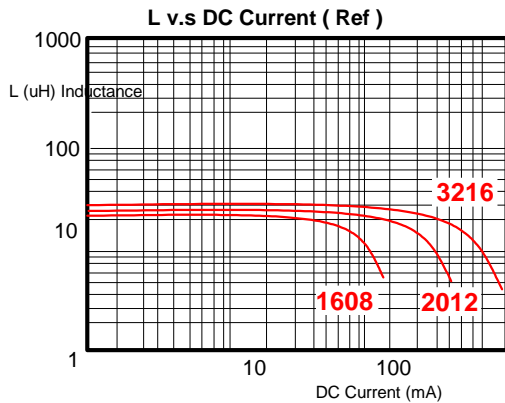
Features & Application:

- * Bead inductor for power energy storage or noise suppressor.
- * Fit for power line & signal line circuit
- * To help you go pass the CE/FCC standard.
- * Mobil Device / Handheld Device / LowProfile Device / Panel...

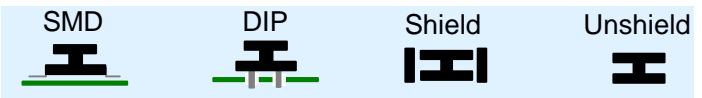
Part No Example:

GBL 321611 P - 2R7 K
 1 2 3 4 5

1. GBL : GOTREND BRAND & PRODUCT TYPE
2. 321611 : Dimension - Length 3.2mm X Width 1.6mm X T1.1mm
3. [P] : Pb free < 1000ppm
4. 2R7 : [L] Value - Inductance 2R7= 2.7uH
5. [K] : Tolerance Code - S = +/- 0.3 nH, J = 5%, K = 10% , M = 20%



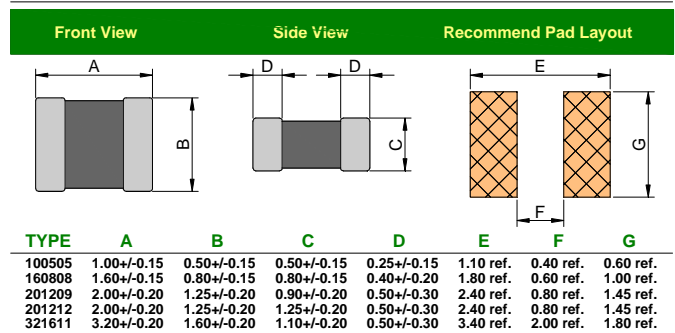
Product Structure



2005 RoHS Compliant - SGS Certified Result

| | | | | | |
|----------|---------|---------|-------------|-------------|---------------|
| 鉛 Pb | 鎘 Cd | 汞 Hg | 六價鉻 Cr+6 | 溴化聯苯 PBB | 溴化聯苯 醌PBDE |
| <1000ppm | ND | ND | ND | ND | ND |

DIMENSION : [mm]



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%

Size Code & Package Quantity:

| JIS CODE | EIA CODE | PCS / REEL | REEL / BOX |
|----------|----------|------------|------------|
| 1005 | 0402 | 10000 | 5 |
| 1608 | 0603 | 4000 | 5 |
| 2012 | 0805 | 4000 | 5 |
| 3216 | 1206 | 3000 | 5 |



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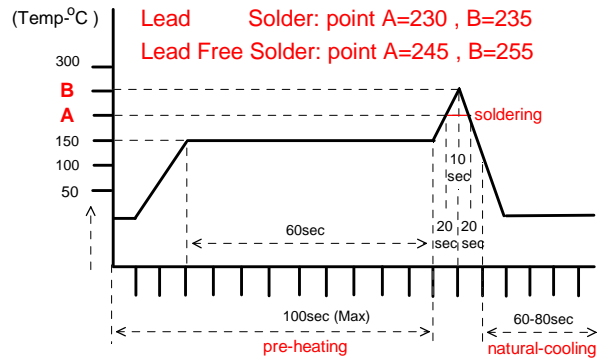
Operating & Storage Condition:

OPERATING TEMP:-40~+85°C
 STORAGE TEMP:-40~+85°C
 STORAGE LIFE TIME: 12 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.

Recommand Reflow Curve (TIME:Second)



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

| Part No. | Inductance (uH) | Q (min) | L&Q Test Freq. (MHz) | S.R.F (MHz) (min) | DCR (ohm) (max) | IDC (mA) (max) |
|---|-----------------|---------|----------------------|-------------------|-----------------|----------------|
| GBL100505P-10N <input type="checkbox"/> | 0.010 ± 20% | 8 | 100 | 300 | 0.42 | 50 |
| GBL100505P-12N <input type="checkbox"/> | 0.012 ± 20% | 8 | 100 | 300 | 0.47 | 50 |
| GBL100505P-47N <input type="checkbox"/> | 0.047 ± 20% | 10 | 50 | 220 | 0.45 | 50 |
| GBL100505P-68N <input type="checkbox"/> | 0.068 ± 20% | 10 | 50 | 210 | 0.45 | 50 |
| GBL100505P-82N <input type="checkbox"/> | 0.082 ± 20% | 10 | 50 | 200 | 0.45 | 50 |
| GBL100505P-R10 <input type="checkbox"/> | 0.10 ± 20% | 15 | 25 | 200 | 0.80 | 50 |
| GBL100505P-R12 <input type="checkbox"/> | 0.12 ± 20% | 15 | 25 | 165 | 0.80 | 25 |
| GBL100505P-R15 <input type="checkbox"/> | 0.15 ± 20% | 15 | 25 | 140 | 0.90 | 25 |
| GBL100505P-R18 <input type="checkbox"/> | 0.18 ± 20% | 15 | 25 | 120 | 0.90 | 25 |
| GBL100505P-R22 <input type="checkbox"/> | 0.22 ± 20% | 15 | 25 | 110 | 1.20 | 25 |
| GBL100505P-R27 <input type="checkbox"/> | 0.27 ± 20% | 15 | 25 | 95 | 1.20 | 25 |
| GBL100505P-R33 <input type="checkbox"/> | 0.33 ± 20% | 15 | 25 | 230 | 1.50 | 25 |
| GBL100505P-R39 <input type="checkbox"/> | 0.39 ± 20% | 25 | 10 | 210 | 0.41 | 20 |
| GBL100505P-R47 <input type="checkbox"/> | 0.47 ± 20% | 20 | 10 | 190 | 0.65 | 10 |
| GBL100505P-R56 <input type="checkbox"/> | 0.56 ± 20% | 20 | 10 | 170 | 0.70 | 10 |
| GBL100505P-R68 <input type="checkbox"/> | 0.68 ± 20% | 20 | 10 | 150 | 0.80 | 10 |
| GBL100505P-R82 <input type="checkbox"/> | 0.82 ± 20% | 20 | 10 | 130 | 0.90 | 10 |
| GBL100505P-1R0 <input type="checkbox"/> | 1.00 ± 20% | 20 | 10 | 120 | 1.50 | 15 |
| GBL100505P-1R2 <input type="checkbox"/> | 1.20 ± 20% | 20 | 10 | 110 | 1.60 | 15 |
| GBL100505P-1R5 <input type="checkbox"/> | 1.50 ± 20% | 20 | 10 | 100 | 1.20 | 10 |
| GBL100505P-1R8 <input type="checkbox"/> | 1.80 ± 20% | 20 | 10 | 90 | 1.30 | 10 |
| GBL100505P-2R2 <input type="checkbox"/> | 2.20 ± 20% | 20 | 10 | 80 | 1.40 | 10 |

* Tolerance Code: J=± 5%, K=± 10%, M=± 20% , N=± 25%



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| Part No. | Inductance (uH) | Q (min) | L&Q Test Freq. (MHz) | S.R.F (MHz) (min) | DCR (ohm) (max) | IDC (mA) (max) |
|---|--------------------|---------|----------------------|-------------------|-----------------|----------------|
| GBL160808P-47N <input type="checkbox"/> | 0.047 ± 20% | 20 | 50 | 260 | 0.30 | 50 |
| GBL160808P-68N <input type="checkbox"/> | 0.068 ± 20% | 20 | 50 | 250 | 0.30 | 50 |
| GBL160808P-82N <input type="checkbox"/> | 0.082 ± 20% | 20 | 50 | 245 | 0.30 | 50 |
| GBL160808P-R10 <input type="checkbox"/> | 0.10 ± 20% or 10% | 30 | 25 | 240 | 0.50 | 50 |
| GBL160808P-R12 <input type="checkbox"/> | 0.12 ± 20% or 10% | 30 | 25 | 205 | 0.50 | 50 |
| GBL160808P-R15 <input type="checkbox"/> | 0.15 ± 20% or 10% | 30 | 25 | 180 | 0.60 | 50 |
| GBL160808P-R18 <input type="checkbox"/> | 0.18 ± 20% or 10% | 30 | 25 | 165 | 0.60 | 50 |
| GBL160808P-R22 <input type="checkbox"/> | 0.22 ± 20% or 10% | 30 | 25 | 150 | 0.80 | 50 |
| GBL160808P-R27 <input type="checkbox"/> | 0.27 ± 20% or 10% | 30 | 25 | 136 | 0.80 | 50 |
| GBL160808P-R33 <input type="checkbox"/> | 0.33 ± 20% or 10% | 30 | 25 | 125 | 0.85 | 35 |
| GBL160808P-R39 <input type="checkbox"/> | 0.39 ± 20% or 10% | 30 | 25 | 110 | 1.00 | 35 |
| GBL160808P-R47 <input type="checkbox"/> | 0.47 ± 20% or 10% | 30 | 25 | 105 | 1.35 | 35 |
| GBL160808P-R56 <input type="checkbox"/> | 0.56 ± 20% or 10% | 30 | 25 | 95 | 1.55 | 35 |
| GBL160808P-R68 <input type="checkbox"/> | 0.68 ± 20% or 10% | 30 | 25 | 85 | 1.70 | 35 |
| GBL160808P-R82 <input type="checkbox"/> | 0.82 ± 20% or 10% | 30 | 25 | 75 | 2.10 | 35 |
| GBL160808P-1R0 <input type="checkbox"/> | 1.00 ± 20% or 10% | 35 | 10 | 65 | 0.60 | 25 |
| GBL160808P-1R2 <input type="checkbox"/> | 1.20 ± 20% or 10% | 35 | 10 | 60 | 0.80 | 25 |
| GBL160808P-1R5 <input type="checkbox"/> | 1.50 ± 20% or 10% | 35 | 10 | 55 | 0.80 | 25 |
| GBL160808P-1R8 <input type="checkbox"/> | 1.80 ± 20% or 10% | 35 | 10 | 50 | 0.95 | 25 |
| GBL160808P-2R2 <input type="checkbox"/> | 2.20 ± 20% or 10% | 35 | 10 | 45 | 1.15 | 15 |
| GBL160808P-2R7 <input type="checkbox"/> | 2.70 ± 20% or 10% | 35 | 10 | 40 | 1.35 | 15 |
| GBL160808P-3R0 <input type="checkbox"/> | 3.00 ± 20% or 10% | 35 | 10 | 40 | 1.55 | 15 |
| GBL160808P-3R3 <input type="checkbox"/> | 3.30 ± 20% or 10% | 35 | 10 | 38 | 1.55 | 15 |
| GBL160808P-3R9 <input type="checkbox"/> | 3.90 ± 20% or 10% | 35 | 10 | 36 | 1.70 | 15 |
| GBL160808P-4R7 <input type="checkbox"/> | 4.70 ± 20% or 10% | 35 | 10 | 33 | 2.10 | 15 |
| GBL160808P-5R6 <input type="checkbox"/> | 5.60 ± 20% or 10% | 35 | 4 | 22 | 1.55 | 5 |
| GBL160808P-6R8 <input type="checkbox"/> | 6.80 ± 20% or 10% | 35 | 4 | 20 | 1.70 | 5 |
| GBL160808P-8R2 <input type="checkbox"/> | 8.20 ± 20% or 10% | 30 | 4 | 18 | 2.10 | 5 |
| GBL160808P-100 <input type="checkbox"/> | 10.00 ± 20% or 10% | 30 | 2 | 17 | 2.55 | 3 |
| GBL160808P-120 <input type="checkbox"/> | 12.00 ± 20% or 10% | 30 | 1 | 15 | 2.75 | 3 |
| GBL160808P-150 <input type="checkbox"/> | 15.00 ± 20% or 10% | 20 | 1 | 14 | 2.85 | 1 |
| GBL160808P-180 <input type="checkbox"/> | 18.00 ± 20% or 10% | 20 | 1 | 13 | 1.80 | 1 |

* Tolerance Code: J=± 5%, K=± 10%, M=± 20% , N=± 25%



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| Part No. | Inductance (uH) | Q (min) | L&Q Test Freq. (MHz) | S.R.F (MHz) (min) | DCR (ohm) (max) | IDC (mA) (max) |
|---|--------------------|---------|----------------------|-------------------|-----------------|----------------|
| GBL201209P-47N <input type="checkbox"/> | 0.047 ± 20% | 25 | 50 | 320 | 0.20 | 300 |
| GBL201209P-68N <input type="checkbox"/> | 0.068 ± 20% | 25 | 50 | 280 | 0.20 | 300 |
| GBL201209P-82N <input type="checkbox"/> | 0.082 ± 20% | 25 | 50 | 255 | 0.20 | 300 |
| GBL201209P-R10 <input type="checkbox"/> | 0.10 ± 20% or 10% | 30 | 25 | 235 | 0.30 | 250 |
| GBL201209P-R12 <input type="checkbox"/> | 0.12 ± 20% or 10% | 30 | 25 | 220 | 0.30 | 250 |
| GBL201209P-R15 <input type="checkbox"/> | 0.15 ± 20% or 10% | 30 | 25 | 200 | 0.40 | 250 |
| GBL201209P-R18 <input type="checkbox"/> | 0.18 ± 20% or 10% | 30 | 25 | 185 | 0.40 | 250 |
| GBL201209P-R22 <input type="checkbox"/> | 0.22 ± 20% or 10% | 30 | 25 | 170 | 0.50 | 250 |
| GBL201209P-R27 <input type="checkbox"/> | 0.27 ± 20% or 10% | 30 | 25 | 150 | 0.50 | 250 |
| GBL201209P-R33 <input type="checkbox"/> | 0.33 ± 20% or 10% | 30 | 25 | 145 | 0.55 | 250 |
| GBL201209P-R39 <input type="checkbox"/> | 0.39 ± 20% or 10% | 30 | 25 | 135 | 0.65 | 250 |
| GBL201209P-R47 <input type="checkbox"/> | 0.47 ± 20% or 10% | 30 | 25 | 125 | 0.65 | 250 |
| GBL201209P-R56 <input type="checkbox"/> | 0.56 ± 20% or 10% | 30 | 25 | 115 | 0.75 | 150 |
| GBL201209P-R68 <input type="checkbox"/> | 0.68 ± 20% or 10% | 30 | 25 | 105 | 0.80 | 150 |
| GBL201209P-R82 <input type="checkbox"/> | 0.82 ± 20% or 10% | 30 | 25 | 100 | 1.00 | 150 |
| GBL201209P-1R0 <input type="checkbox"/> | 1.00 ± 20% or 10% | 45 | 10 | 75 | 0.45 | 50 |
| GBL201209P-1R2 <input type="checkbox"/> | 1.20 ± 20% or 10% | 45 | 10 | 65 | 0.50 | 50 |
| GBL201209P-1R5 <input type="checkbox"/> | 1.50 ± 20% or 10% | 45 | 10 | 60 | 0.50 | 50 |
| GBL201209P-1R8 <input type="checkbox"/> | 1.80 ± 20% or 10% | 45 | 10 | 55 | 0.60 | 50 |
| GBL201209P-2R2 <input type="checkbox"/> | 2.20 ± 20% or 10% | 45 | 10 | 50 | 0.65 | 30 |
| GBL201209P-3R3 <input type="checkbox"/> | 3.30 ± 20% or 10% | 45 | 10 | 41 | 0.80 | 30 |
| GBL201209P-4R7 <input type="checkbox"/> | 4.70 ± 20% or 10% | 45 | 10 | 35 | 1.00 | 30 |
| GBL201209P-100 <input type="checkbox"/> | 10.00 ± 20% or 10% | 50 | 2 | 24 | 1.10 | 25 |
| GBL201212P-2R7 <input type="checkbox"/> | 2.70 ± 20% or 10% | 45 | 10 | 45 | 0.75 | 30 |
| GBL201212P-3R3 <input type="checkbox"/> | 3.30 ± 20% or 10% | 45 | 10 | 41 | 0.80 | 30 |
| GBL201212P-3R9 <input type="checkbox"/> | 3.90 ± 20% or 10% | 45 | 10 | 38 | 0.90 | 30 |
| GBL201212P-4R7 <input type="checkbox"/> | 4.70 ± 20% or 10% | 45 | 10 | 35 | 1.00 | 30 |
| GBL201212P-5R6 <input type="checkbox"/> | 5.60 ± 20% or 10% | 45 | 4 | 32 | 1.00 | 15 |
| GBL201212P-6R8 <input type="checkbox"/> | 6.80 ± 20% or 10% | 45 | 4 | 29 | 1.00 | 15 |
| GBL201212P-8R2 <input type="checkbox"/> | 8.20 ± 20% or 10% | 45 | 4 | 26 | 1.10 | 15 |
| GBL201212P-100 <input type="checkbox"/> | 10.00 ± 20% or 10% | 45 | 2 | 24 | 1.15 | 15 |
| GBL201212P-120 <input type="checkbox"/> | 12.00 ± 20% or 10% | 45 | 2 | 22 | 1.25 | 15 |
| GBL201212P-150 <input type="checkbox"/> | 15.00 ± 20% or 10% | 30 | 1 | 19 | 0.80 | 5 |
| GBL201212P-180 <input type="checkbox"/> | 18.00 ± 20% or 10% | 30 | 1 | 18 | 0.90 | 5 |
| GBL201212P-220 <input type="checkbox"/> | 22.00 ± 20% or 10% | 30 | 1 | 16 | 1.10 | 5 |
| GBL201212P-270 <input type="checkbox"/> | 27.00 ± 20% or 10% | 30 | 1 | 14 | 1.15 | 5 |
| GBL201212P-330 <input type="checkbox"/> | 33.00 ± 20% or 10% | 30 | 0.4 | 13 | 1.25 | 5 |

* Tolerance Code: J=± 5%, K=± 10%, M=± 20% , N=± 25%



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| Part No. | Inductance (uH) | Q (min) | L&Q Test Freq. (MHz) | S.R.F (MHz) (min) | DCR (ohm) (max) | IDC (mA) (max) |
|---|--------------------|---------|----------------------|-------------------|-----------------|----------------|
| GBL321611P-47N <input type="checkbox"/> | 0.047 ± 20% | 25 | 50 | 320 | 0.15 | 300 |
| GBL321611P-68N <input type="checkbox"/> | 0.068 ± 20% | 25 | 50 | 280 | 0.25 | 300 |
| GBL321611P-82N <input type="checkbox"/> | 0.082 ± 20% | 25 | 50 | 250 | 0.25 | 300 |
| GBL321611P-R10 <input type="checkbox"/> | 0.10 ± 20% or 10% | 30 | 25 | 235 | 0.25 | 250 |
| GBL321611P-R12 <input type="checkbox"/> | 0.12 ± 20% or 10% | 30 | 25 | 220 | 0.30 | 250 |
| GBL321611P-R15 <input type="checkbox"/> | 0.15 ± 20% or 10% | 30 | 25 | 200 | 0.30 | 250 |
| GBL321611P-R18 <input type="checkbox"/> | 0.18 ± 20% or 10% | 30 | 25 | 185 | 0.40 | 250 |
| GBL321611P-R22 <input type="checkbox"/> | 0.22 ± 20% or 10% | 30 | 25 | 170 | 0.40 | 250 |
| GBL321611P-R27 <input type="checkbox"/> | 0.27 ± 20% or 10% | 30 | 25 | 150 | 0.50 | 250 |
| GBL321611P-R33 <input type="checkbox"/> | 0.33 ± 20% or 10% | 30 | 25 | 145 | 0.60 | 250 |
| GBL321611P-R39 <input type="checkbox"/> | 0.39 ± 20% or 10% | 30 | 25 | 135 | 0.60 | 200 |
| GBL321611P-R47 <input type="checkbox"/> | 0.47 ± 20% or 10% | 30 | 25 | 125 | 0.60 | 200 |
| GBL321611P-R56 <input type="checkbox"/> | 0.56 ± 20% or 10% | 30 | 25 | 115 | 0.70 | 150 |
| GBL321611P-R68 <input type="checkbox"/> | 0.68 ± 20% or 10% | 30 | 25 | 105 | 0.80 | 150 |
| GBL321611P-R82 <input type="checkbox"/> | 0.82 ± 20% or 10% | 30 | 25 | 100 | 0.90 | 150 |
| GBL321611P-1R0 <input type="checkbox"/> | 1.00 ± 20% or 10% | 45 | 10 | 75 | 0.40 | 100 |
| GBL321611P-1R2 <input type="checkbox"/> | 1.20 ± 20% or 10% | 45 | 10 | 65 | 0.50 | 100 |
| GBL321611P-1R5 <input type="checkbox"/> | 1.50 ± 20% or 10% | 45 | 10 | 60 | 0.50 | 80 |
| GBL321611P-1R8 <input type="checkbox"/> | 1.80 ± 20% or 10% | 45 | 10 | 55 | 0.50 | 70 |
| GBL321611P-2R2 <input type="checkbox"/> | 2.20 ± 20% or 10% | 45 | 10 | 50 | 0.60 | 60 |
| GBL321611P-2R7 <input type="checkbox"/> | 2.70 ± 20% or 10% | 45 | 10 | 45 | 0.60 | 60 |
| GBL321611P-3R3 <input type="checkbox"/> | 3.30 ± 20% or 10% | 45 | 10 | 41 | 0.70 | 60 |
| GBL321611P-3R9 <input type="checkbox"/> | 3.90 ± 20% or 10% | 45 | 10 | 38 | 0.80 | 50 |
| GBL321611P-4R7 <input type="checkbox"/> | 4.70 ± 20% or 10% | 45 | 10 | 35 | 0.90 | 50 |
| GBL321611P-5R6 <input type="checkbox"/> | 5.60 ± 20% or 10% | 45 | 4 | 32 | 0.70 | 25 |
| GBL321611P-6R8 <input type="checkbox"/> | 6.80 ± 20% or 10% | 45 | 4 | 29 | 0.80 | 25 |
| GBL321611P-8R2 <input type="checkbox"/> | 8.20 ± 20% or 10% | 45 | 4 | 26 | 0.90 | 25 |
| GBL321611P-100 <input type="checkbox"/> | 10.00 ± 20% or 10% | 45 | 2 | 24 | 1.00 | 25 |
| GBL321611P-120 <input type="checkbox"/> | 12.00 ± 20% or 10% | 45 | 2 | 22 | 1.05 | 15 |
| GBL321611P-150 <input type="checkbox"/> | 15.00 ± 20% or 10% | 35 | 1 | 19 | 0.70 | 5 |
| GBL321611P-180 <input type="checkbox"/> | 18.00 ± 20% or 10% | 35 | 1 | 18 | 0.75 | 5 |
| GBL321611P-220 <input type="checkbox"/> | 22.00 ± 20% or 10% | 35 | 1 | 16 | 0.90 | 5 |
| GBL321611P-270 <input type="checkbox"/> | 27.00 ± 20% or 10% | 35 | 1 | 14 | 0.95 | 5 |
| GBL321611P-330 <input type="checkbox"/> | 33.00 ± 20% or 10% | 35 | 0.4 | 13 | 1.05 | 5 |
| GBL321611P-390 <input type="checkbox"/> | 39.00 ± 20% or 10% | 40 | 2 | 11 | 3.00 | 5 |
| GBL321611P-470 <input type="checkbox"/> | 47.00 ± 20% or 10% | 40 | 2 | 10 | 3.40 | 5 |

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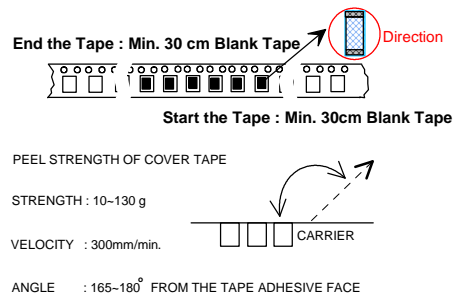
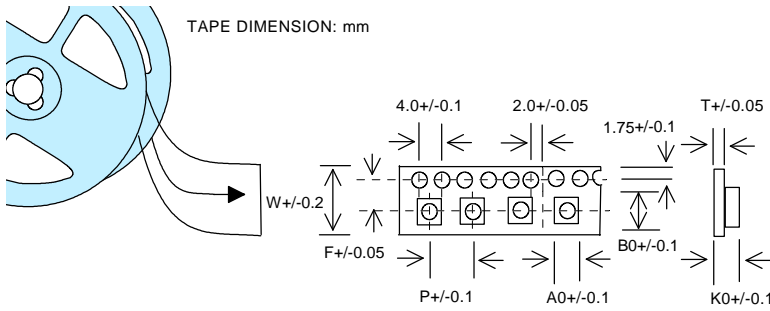


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| Reliability Test Result : | | | | | | | | | | | | | | | | | | | |
|---------------------------|--------------------------------------|---|--|------|----------|------|---|----------------|-----------|-------|---|----------------|----------|-------|---|----------------|-----------|-------|-----------------------|
| NO | ITEM | TEST CONDITIONS | REMARKS | | | | | | | | | | | | | | | | |
| 1 | Thermal Shock (Temperature Cycle) | 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 | 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 | 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 | Temperature: -40 \pm 2 ° C Time: 1000 \pm 12 Hours | | | | | | | | | | | | | | | | | |
| 5 | Temperature and Humidity Cycle | <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\pm 2 ° C</td> <td>95~100%RH</td> <td>3.0Hr</td> </tr> <tr> <td>2</td> <td>55\pm 2 ° C</td> <td>95~96%RH</td> <td>9.5Hr</td> </tr> <tr> <td>3</td> <td>25\pm 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 | ■NO.5 Cycle: 5 cycles |
| 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 | Frequency: 10Hz~55Hz Amplitude: 1.5mm Direction: X, Y, Z Time: 2 Hours each | | | | | | | | | | | | | | | | | |
| 7 | IR Reflow Soldering | 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 | 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 | | The terminal electrode and the ferrite must not be damaged by the forces applied on the test conditions. 100505: ≥ 1 kg 201209, 160808: ≥ 3 kg 321616, 321611, 322513: ≥ 6 kg 453215, 453216: ≥ 8 kg | | | | | | | | | | | | | | | | |
| 10 | Flexure Strength | | No mechanical damage shall be noticed even when the board is bent 2 mm | | | | | | | | | | | | | | | | |
| 11 | Terminal Strength | | The terminal electrode and the ferrite must not be damaged by the forces applied on the test conditions. 100505: ≥ 0.2 kg 160808: ≥ 0.5 kg 201209: ≥ 1.0 kg 321611: ≥ 1.5 kg 453215: ≥ 2.0 kg | | | | | | | | | | | | | | | | |

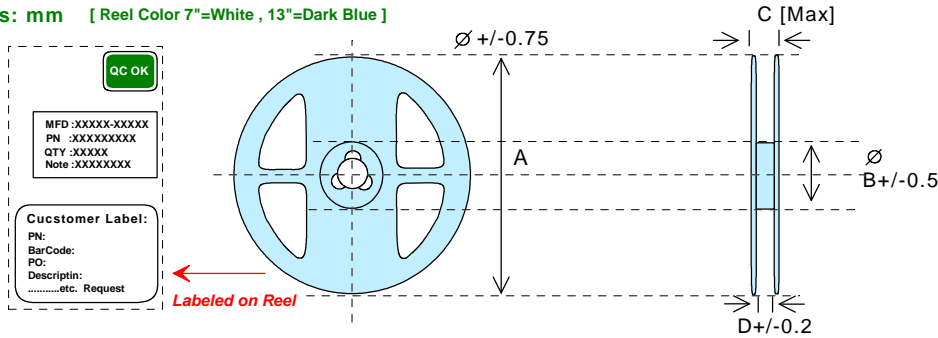


| | | | |
|---------------------|-------------------|-------------|------------------------------------|
| Product Series Code | GBL | Brand | GOTREND |
| File Version | GBL-V3R0 | Editor | Teddy |
| Established Date | 1997.09.28 | Description | Multilayer Ferrite Chip Ind |
| Latest Edit Date | 2014.09.10 | Pages | Page : 8 |



| SIZE/mm | A | B | C | D | E | F | G | H | I | J |
|---------------|------|------|------|------|------|------|------|------|------|------|
| 100505 | 2.00 | 0.62 | 1.15 | 1.75 | 2.00 | 4.00 | 8.00 | 3.50 | 0.70 | 0.20 |
| 160808 | 4.00 | 0.97 | 1.80 | 1.75 | 2.00 | 4.00 | 8.00 | 3.50 | 1.05 | 0.20 |
| 201209 | 4.00 | 1.54 | 2.32 | 1.75 | 2.00 | 4.00 | 8.00 | 3.50 | 1.15 | 0.20 |
| 201212 | 4.00 | 1.54 | 2.32 | 1.75 | 2.00 | 4.00 | 8.00 | 3.50 | 1.35 | 0.20 |
| 321611 | 4.00 | 1.94 | 3.54 | 1.75 | 2.00 | 4.00 | 8.00 | 3.50 | 1.29 | 0.20 |

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



| SIZE / mm | A | B | C | D | REEL SIZE | QTY/REEL |
|---------------|-----|----|----|----|-----------|----------|
| 100505 | 178 | 60 | 12 | 10 | 7" | 4K |
| 160808 | 178 | 60 | 12 | 10 | 7" | 4K |
| 201209 | 178 | 60 | 12 | 10 | 7" | 4K |
| 201211 | 178 | 60 | 12 | 10 | 7" | 4K |
| 321611 | 178 | 60 | 12 | 10 | 7" | 3K |

BOX Package:cm

