Resistors

Glueable Chip Resistor

GCR Series

- Suitable for conductive adhesive
- Planar and wraparound versions
- High temperature operation to 200°C
- Non-magnetic (G, P & EW types)
- Range 0805 to 2512 at 1R0 to 10M
- RoHS compliant







All parts are Pb-free and comply with EU Directive 2011/65/EU (RoHS2)

Electrical Data

| Size | | 0805 | 1206 | 2010 | 2512 | |
|-------------------------------------|-----------|--|------|-------|------|--|
| Power @70°C | W | 0.125 | 0.25 | 0.625 | 1 | |
| Resistance range | ohms | 1R0 to 10M | | | | |
| Tolerance | % | 1, 5 | | | | |
| LEV | V | 150 | 200 | 400 | 500 | |
| TCR | ppm/°C | <10R:200 ≥10R:100 | | | | |
| Operating temperature | °C | -55 to +200 | | | | |
| Thermal Impedance | °C/W | 220 | 160 | 75 | 40 | |
| Values | | E24 or E96 preferred - other values to special order | | | | |
| Zero-ohm jumper current rating | Α | 1.5 | 2 | | | |
| Zero-ohm jumper residual resistance | milliohms | <50 | | | | |

Physical Data (All dimensions in mm and nominal weight in g)

| | L | W | Т | A & C | Wt. | G & P types | EW & GW types | |
|------|-------------------|---------------|---------------|-------------------|-------|-------------|---------------------------------------|--|
| 0805 | 2.0 +0.2/-0.15 | 1.25 ±0.15 | 0.5 ±0.15 | 0.4 ±0.2 | 0.009 | | C _C | |
| 1206 | 3.15 +0.2/-0.2 | 1.6 ±0.15 | 0.5 ±0.15 | 0.45 ±0.2 | 0.020 | T | | |
| 2010 | 5.0 ±0.2 | 2.5 ±0.2 | 0.65 ±0.15 | 0.5 +0.25/-0.3 | 0.036 | | L | |
| 2512 | 6.25 ±0.25 | 3.2 ±0.2 | 0.65 ±0.15 | 0.6 +0.25/-0.3 | 0.055 | | Wrap-around terminations (3 faces) | |

Construction

Planar gold G type or PtAg P types: Electrodes, resistor material and overglaze are printed onto an alumina substrate. The resistors are laser trimmed to the required value and protected.

Wraparound EW type: Thick-film PtAg electrodes, resistor material and overglaze are printed onto an alumina substrate. The resistors are laser trimmed to the required value and protected. The terminations are wraparound coated with a polymer Ag material.

Wraparound GW type: These are made as the EW type then plated with a nickel barrier and Gold. All termination styles are suitable for attachment with conductive adhesive.

Marking

The components are not marked; all data is printed onto the packaging.

Solvent Resistance

The component is resistant to all normal industrial cleaning solvents suitable for printed circuits.

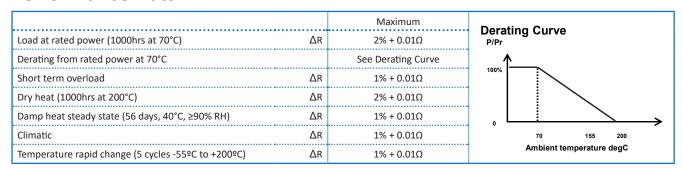
General Note

Glueable Chip Resistor

GCR Series



Performance Data

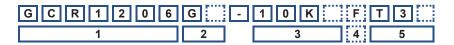


Packaging

0805 and 1206 GCR series resistors are supplied on 8mm carrier tape and 7 inch reels as per IEC 286-3, quantity per reel; 3000. 2010 and 2512 GCR series resistors are supplied on 12mm carrier tape and 7 inch reels as per IEC 286-3, quantity per reel; 2010: 3000pcs; 2512: 1800pcs.

Ordering Procedure

Example: GCR1206G-10KFT3 (GCR1206 in gold planar format at 10 kilohms ±1%, Pb-free)



| 1 | 2 | | 3 | 4 | 5 | | |
|---------|------------------|--------------------------------------|------------------------------|-----------|---------|------------|-----------------------|
| Type | Type Termination | | Value | Tolerance | Packing | | |
| GCR0805 | G | Gold planar | 3/4 characters | F = ±1% | ТЗ | 0805,1206, | Tana un ta 2000/raal |
| GCR1206 | Р | PtAg planar | R = ohms | J = ±5% | 13 | 2010 | Tape, up to 3000/reel |
| GCR2010 | EW | Polymer Ag wraparound | K = kilohms | Omit for | T18 | 2512 | Tape, up to 1800/reel |
| GCR2512 | GW | Ni Barrier & Au plated wraparound | M = megohms R000 = jumper | jumper | | | |