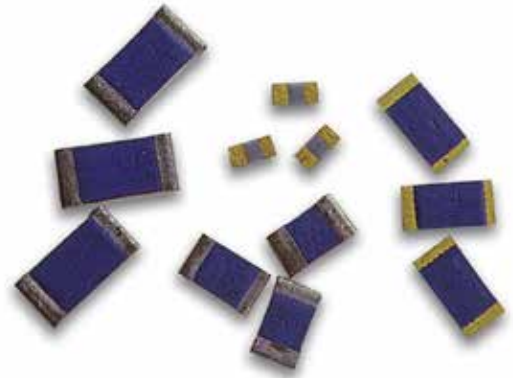


GCR Series

Features

- 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

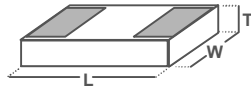
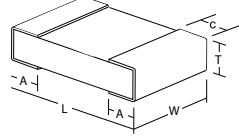


 All parts are Pb-free and comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

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	A	1.5	2		
Zero-ohm jumper residual resistance	milliohms	<50			

Physical Data

Dimensions (mm) & weight (mg)							G & P types	EW & GW types
	L	W	T max	A	C	Wt.		
0805	2.0±0.15	1.25±0.15	0.6	0.3±0.15	0.3±0.1	4.7		
1206	3.2±0.2	1.6±0.2	0.7	0.4±0.2	0.4±0.15	8.5		
2010	5.1±0.3	2.5±0.2	0.8	0.6±0.3	0.6±0.25	36		
2512	6.5±0.3	3.2±0.2	0.8	0.6±0.3	0.6±0.25	55		

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

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GCR Series

Performance Data

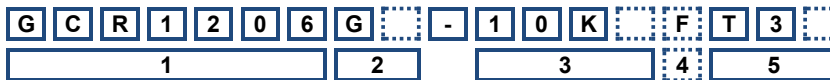
		Maximum	Derating Curve
Load at rated power (1000hrs at 70°C)	ΔR	2% + 0.01Ω	
Derating from rated power at 70°C		See Derating Curve	
Short term overload	ΔR	1% + 0.01Ω	
Dry heat (1000hrs at 200°C)	ΔR	2% + 0.01Ω	
Damp heat steady state (56 days, 40°C, ≥90% RH)	ΔR	1% + 0.01Ω	
Climatic	ΔR	1% + 0.01Ω	
Temperature rapid change (5 cycles -55°C to +200°C)	ΔR	1% + 0.01Ω	

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	Termination		Value	Tolerance	Packing	
GCR0805	G	Gold planar	3/4 characters R = ohms	F = ±1%	T3	0805,1206, 2010
GCR1206	P	PtAg planar		J = ±5%		
GCR2010	EW	Polymer Ag wraparound	K = kilohms M = megohms R000 = jumper	Omit for jumper	T18	2512
GCR2512	GW	Ni Barrier & Au plated wraparound				

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