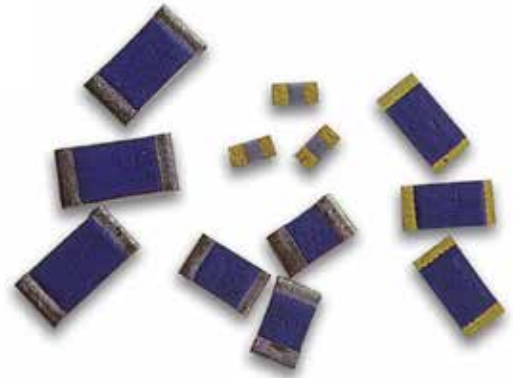


GCR Series

OBSOLETE

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)								
	L	W	T max	A	C	Wt.	G & P types	EW & GW types
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

TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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Performance Data

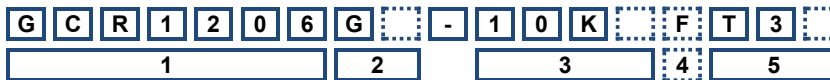
		Maximum	Derating Curve
Load at rated power (1000hrs at 70°C)	ΔR	2% + 0.01Ω	
Derating from rated power at 70°C		See Derating Curve	
Short term overload	ΔR	1% + 0.01Ω	
Dry heat (1000hrs at 200°C)	ΔR	2% + 0.01Ω	
Damp heat steady state (56 days, 40°C, ≥90% RH)	ΔR	1% + 0.01Ω	
Climatic	ΔR	1% + 0.01Ω	
Temperature 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	Omit for jumper	T18	2512
GCR2512	GW	Ni Barrier & Au plated wraparound	M = megohms R000 = jumper			

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