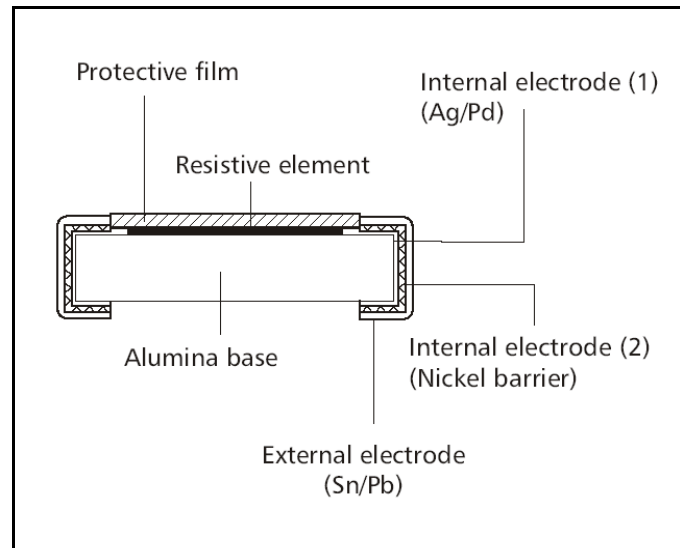


Thick Film Chip Resistors (semi-precision)



TYPE CPG SERIES

Precious metal terminations are screen printed onto a ceramic base and fired. The resistive element is screen printed and fired and the passivation layer added. Each resistor is trimmed to tolerance by laser. The pre-scribed tile is broken into strips, the end plating is fired on and the strips broken into individual components. Final termination is made by electroplating.

KEY FEATURES

- Case sizes 0603, 0805, 1206
- A semi-precision thick film resistor with a temperature coefficient of 50ppm/°C and tolerance down to 0.5%.
- CPG chip resistors are suitable for most applications, including high frequency operation, owing to the short lead structure and low capacitance.
- Particularly suitable for use where low TC or tolerance are important at a low cost.

STOCKISTS:

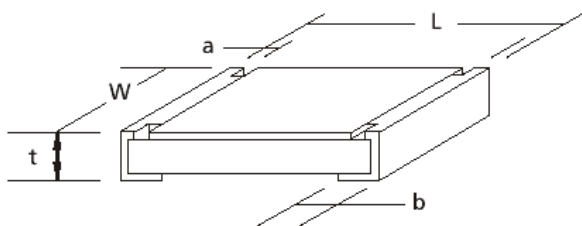
This product is not available in Distribution.

TYPE CPG SERIES

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 ISSUE 2

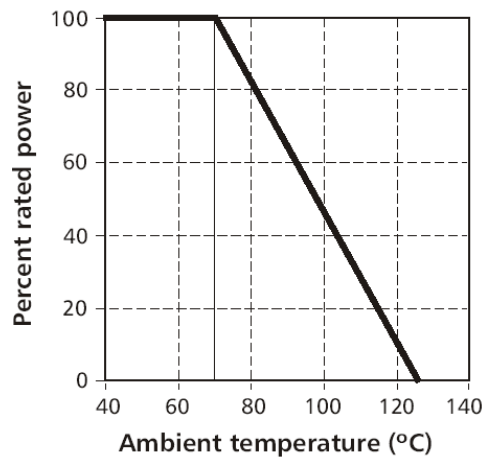
SPECIFICATIONS		0603 0.063				0805 0.1		1206 0.125	
Rated Power @ 70 °C	UNITS Watts								
Resistance Range	Min	100	10	100	1M1	10	10	10	10
	Max	Ohms	1M1	91	1M0	3M3	3M3	3M3	4M7
Tolerance	%	0.5	1			0.5	1	0.5	1
Code letter		D	F			D	F	D	F
Selection Series		E24 E96							
Temperature Coefficient	ppm/°C	±50	±100	±50	±100	±50	±50	±50	±50
Code Letter		C	D	C	D	C	C	C	C
Limiting Element Voltage	Volts	50			150		200		
Max Overload Voltage	Volts	100			300		400		
Dielectric Strength Min	V	100			300		400		
Operating Temperature Range	°C	-55 to +125							
Climatic Category		55/125/56							
Insulation Resistance Dry Min	Mohms	1000							
Stability	%	0.5							
Surface Temperature Rise Max	°C	400							

DIMENSIONS



STYLE	L	W	T	a	b
0603	1.6 ± 0.1	0.85 ± 0.1	0.45 ± 0.1	0.25 ± 0.1	0.3 ± 0.1
0805	2 ± 0.1	1.25 ± 0.1	0.6 ± 0.1	0.4 ± 0.2	0.4 ± 0.2
1206	3.2 ± 0.15	1.6 ± 0.15	0.66 ± 0.1	0.5 ± 0.25	0.5 ± 0.25

DERATING CURVE



MARKING

E24 series resistors are marked with a three digit code.
 E96 series resistors are marked with a four digit code.
 0603 E96 series are unmarked.

MOUNTING

The resistors are suitable for processing on automatic insertion equipment.

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PACKAGING

All chip resistors are supplied on reels of 5000 pieces. For details, see figures 1 - 2. Also available in bulk cassettes.

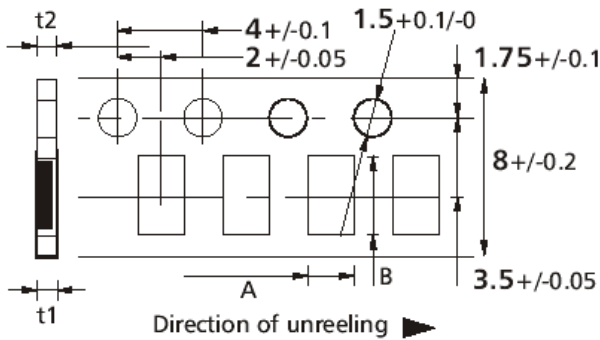


Fig. 1 - 8mm wide tape - 4mm pitch

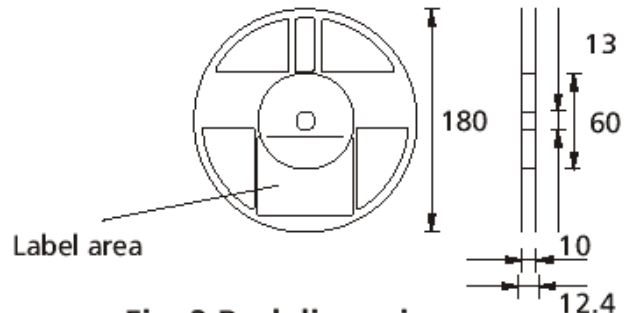


Fig. 2 Reel dimensions

All tape and reel dimensions are in accordance with IEC-286-3 (1991)

	0603	0805	1206
Tape Width	8	8	8
A	1.15	1.65	2
tol	± 0.15	± 0.15	± 0.15
B	1.9	2.5	3.6
tol	± 0.2	± 0.2	± 0.2
t1	0.6	0.8	0.8
tol	± 0.1	± 0.1	± 0.1
t2 max	0.8	1	1

PERFORMANCE CHARACTERISTICS

The evaluation of the performance characteristics is carried out with reference to IECQ specifications QC 400 000 and QC 400 100.

TEST REF	Long Term Tests ±(5% + 0.1 ohm)
4.23	Climatic sequence
4.24	Damp heat, steady state
4.25.1	Endurance at 70 °C
4.25.3	Endurance at 125 °C
TEST REF	Short Term Tests ±(1% + 0.05 ohm)
4.13	Overload
4.32	Adhesion
4.33	Bond strength of end face plating
4.19	Rapid change of temperature
4.18	Resistance to soldering heat

STORAGE

Unopened reels should be stored within a temperature range of +5 °C to +25 °C, separated from any dust, chemicals and solvent based materials. Non-adherence to this procedure could affect the solderability of this product.

HOW TO ORDER

Orders for these components should include the following information:-

Type, tolerance code letter, value and temperature coefficient code letter e.g. CPG0603 F 1K0 C

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