

# **Type CPG Series**

### **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

LTB 18/08/2023

PRODUCT PLANNED FOR

EOL



TE Connectivity is pleased to offer this Thick Film Precision Chip Resistor. With Temperature Coefficient of ±50PPM, and tolerance down to 0.5% this part features a highly reliable multi-layer electrode construction, along with an additional glass overcoat for improved performance and longevity.

## **Characteristics - Electrical**

	06	03	08	05	12	06
Rated power @ 70°C (W)	0.1		0.125		0.25	
Resistance range (Ohms) Min	10		10		10	
Max	10M		10M		10M	
Tolerance %	0.5	া	0.5	i1 -	0.5	3
Code letter	D	F	D	F	D	F
Temperature coefficient (ppm/°C)	±t	50	±5	0	ź	50
Code letter	C	1. J	c	2	0	2
Limiting element voltage (V)	7	5	15	i0	20	00
Maximum overload voltage (V)	150		300		400	
Dialectric strength min. (V)	150		300		400	
Operating temperature range (°C)	-55 to +155					
Climatic category	55/125/56					
Insulation resistance dry min (M Ω)	1000					
Stability (%)	0.5					
Surface temperature rise max. (°C)	400					

## Dimensions



Style	L.	w	t	а	b
0603	1.6 ±0.1	0.80 ±0.1	0.45 ±0.1	0.30 ±0.2	0.30 ±0.2
0805	2.0 ±0.1	1.25 ±0.1	0.50 ±0.1	0.35 ±0.2	0.40 ±0.2
1206	3.10 ±0.1	1.55 ±0.1	0.55 ±0.1	0.50 ±0.25	0.50 ±0.2

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# Type CPG Series

# **Power Derating Curve**



### Mounting

The resistors are suitable for processing on automatic insertion equipment

#### Performance characteristics

The evaluation of the performance characteristics is carried out with reference to IEC 60115-1, 60068-2-58 and JIS-C 5201-1

TEST REF	Long Term Tests ±(1.0% + 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% + 0.1 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

Storage Temperature 25 ±3°C, Humidity <80% RH. Protect from any dust, chemicals and solvent based materials. Non-adherence to this procedure could affect the solderability of this product.

#### How to order

CPG	0603	F	10R	
Common Part	Size	Tolerance	Resistance Value	
CPG - Thick Film Precision Chip Resistor	0603 0805 1206	F = ±1% D = ±0.5%	10 ohms (10 ohms) <b>10R</b> 1K ohms (1000 ohms) <b>1KO</b> 100K ohms (10000 ohms) <b>100K</b> 1M ohms (1000000ohms) <b>1MO</b>	

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