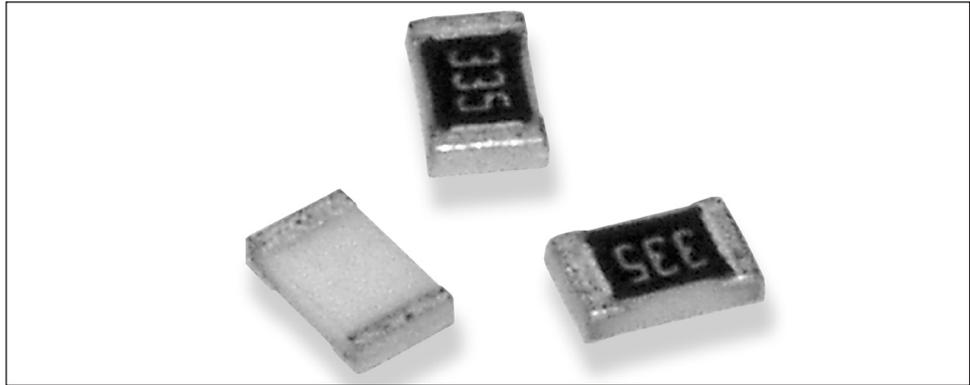


## Type CPG Series

### 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

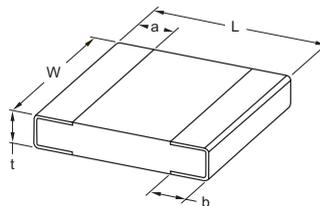


TE Connectivity is pleased to offer this Thick Film Precision Chip Resistor. With Temperature Coefficient of  $\pm 50$ PPM, and tolerance down to 0.5% this part features a highly reliable multi-layer electrode construction, along with an additional glass overcoat for improved performance and longevity.

### Characteristics - Electrical

	0603		0805		1206	
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	1	0.5	1	0.5	1
	Code letter	D	F	D	F	D
Temperature coefficient (ppm/°C)	$\pm 50$		$\pm 50$		$\pm 50$	
Code letter	C		C		C	
Limiting element voltage (V)	75		150		200	
Maximum overload voltage (V)	150		300		400	
Dielectric strength min. (V)	150		300		400	
Operating temperature range (°C)	-55 to +155					
Climatic category	55/125/56					
Insulation resistance dry min (M $\Omega$ )	1000					
Stability (%)	0.5					
Surface temperature rise max. (°C)	400					

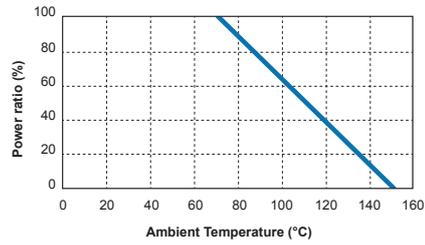
### Dimensions



Style	L	W	t	a	b
0603	1.6 $\pm$ 0.1	0.80 $\pm$ 0.1	0.45 $\pm$ 0.1	0.30 $\pm$ 0.2	0.30 $\pm$ 0.2
0805	2.0 $\pm$ 0.1	1.25 $\pm$ 0.1	0.50 $\pm$ 0.1	0.35 $\pm$ 0.2	0.40 $\pm$ 0.2
1206	3.10 $\pm$ 0.1	1.55 $\pm$ 0.1	0.55 $\pm$ 0.1	0.50 $\pm$ 0.25	0.50 $\pm$ 0.2

## 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 $\pm(1.0\% + 0.1 \text{ ohm})$
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 $\pm(1.0\% + 0.1 \text{ ohm})$
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  $25 \pm 3^\circ\text{C}$ , Humidity  $<80\% \text{ RH}$ . 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
<b>Common Part</b>	<b>Size</b>	<b>Tolerance</b>	<b>Resistance Value</b>
CPG - Thick Film Precision Chip Resistor	0603 0805 1206	F = $\pm 1\%$ D = $\pm 0.5\%$	10 ohms (10 ohms) <b>10R</b> 1K ohms (1000 ohms) <b>1K0</b> 100K ohms (10000 ohms) <b>100K</b> 1M ohms (1000000ohms) <b>1M0</b>