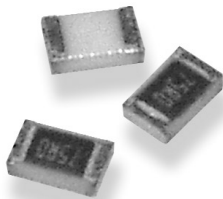


Type CPF Series

Type CPF Series



Precision metal terminations are screen printed onto a ceramic base and fired. The resistive element is sputtered and fired and the passivation layer added. 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.

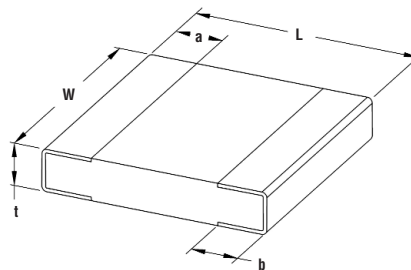
Key Features

- Thin film precision resistors with TC's of 25 and 50ppm and tolerances to 0.1%. Applications in measurement, telemetry and for sensing circuits.
- Case sizes 0603, 0805, 1206
- CPF chip resistors are suitable for all applications where close accuracy and stability are essential

Characteristics - Electrical

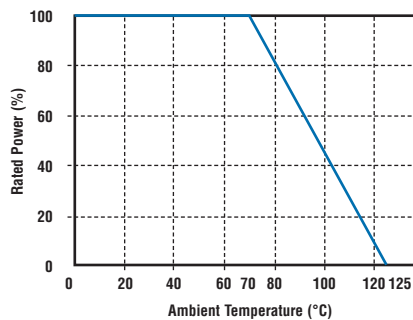
	0603			0805			1206		
Rated Power @ 70 °C (W)	0.063			0.1			0.125		
Resistance Range (Ohms) Min	100	10	100	100	10	100	49.9	10	10
	Max	332K	97R6	360K	1M0	97R6	1M0	1M0	1M0
Tolerance (%)	0.1		0.5	0.1		0.5	0.1		0.5
Code letter	B		D	B		D	B		D
Selection Series	E24 - E96								
Temperature Coefficient (ppm/°C)	-25	-50	-25	-25	-50	-25	-25	-50	-50
Code Letter	E	C	E	E	C	E	E	C	C
Limiting Element Voltage (V)	60			100			150		
Maximum Overload Voltage (V)	120			200			300		
Operating Temperature Range (°C)	-55 to +125								
Climatic Category (°C)	55/125/56								
Insulation Resistance Dry Min (Mohms)	10000								
Stability (%)	0.5								

Dimensions



Style	L	W	t	a	b
0603	1.6 ± 0.1	0.8 ± 0.1	0.45 ± 0.1	0.25 ± 0.1	0.2 ± 0.1
0805	2.0 ± 0.2	1.25 ± 0.2	0.5 ± 0.1	0.4 ± 0.2	0.3 ± 0.2
1206	3.1 ± 0.2	1.55 ± 0.2	0.55 ± 0.1	0.45 ± 0.2	0.3 ± 0.2

Power Derating Curve



Type CPF Series

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.

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 $\pm(0.5\% + 0.05 \text{ ohm})$
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 $\pm(0.5\% + 0.05 \text{ ohm})$
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

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

CPF	0603	B	1K13	E
Common Part	Package Size	Tolerance	Resistance Value	TCR
CPF - Chip Precision Film Resistor	0603 0805 1206	B - 0.1% D - 0.5%	100 ohms (100 ohms) 100R 1 K ohm (1000 ohms) 1K0 100 K ohm (100000 ohms) 100K	E - 25ppm C - 50ppm