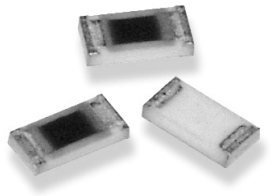
Type FCR Series



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 sand blasting. The prescribed tile is broken into strips, the end plating is fired on and the strips broken into individual components. Final termination is made by electroplating.

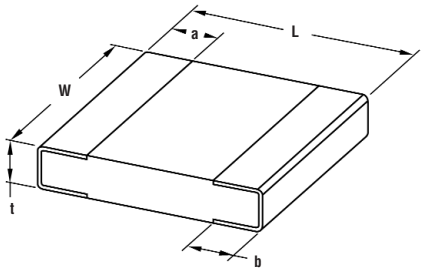
Key Features

- **Chip resistors with known fusible characteristics. These resistors will not produce flames or smoke during fusing.**
- **Suitable for battery operated circuits.**
- **Case sizes 0805, 1206 and 2010.**
- **FCR chip resistors are suitable for most applications, including high frequency operation.**

Characteristics - Electrical

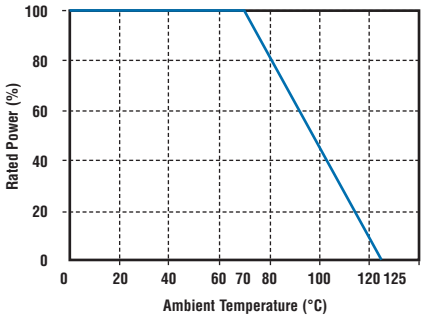
	0805	1206	2010
Rated Power @ 70 °C (W)	0.1	0.125	0.5
Resistance Range (Ohms) Min	1	1	1
Max	51	100	100
Tolerance (%)	5		
Code letter	J		
Temperature Coefficient (ppm/°C)	1000		
Selection Series	E24		
Operating Temperature Range (°C)	-55 to +125		
Climatic Category	55/125/56		
Fusing Characteristics (W)			
10ms		20	50
100ms		8	17
Maximum Fusing Time (30 s)	2.0	2.5	4.0

Dimensions



Style	L	W	t	a	b
0805	2.0 ±0.1	1.25 ±0.1	0.6 ±0.1	0.4 ±0.2	0.4 ±0.2
1206	3.2 ±0.2	1.6 ±0.2	0.6 ±0.1	0.5 ±0.3	0.5 ±0.25
2010	5.0 ±0.2	2.5 ±0.2	0.6 ±0.1	0.5 ±0.3	0.4 ±0.2/-0.1

Power Derating Curve



Type FCR Series

Mounting

The resistors are suitable for processing on automatic insertion equipment.

Marking

E24 series resistors are marked with a three digit code.

Packaging

All chip resistors are supplied on reels of 2000 or 5000 pieces.

Performance Characteristics

The evaluation of the performance characteristics is carried out with reference to IEC Specifications QC 400 000 and QC 400 600.

TEST REF	Tests	Test Requirements
4.24	Damp heat, steady state	±5%
4.25.1	Endurance at 70 °C	0805 ±10% 1206, 2010 ±5%
4.13	Short Term Overload	±5%
4.19	Rapid change of temperature	±5%
4.18	Resistance to soldering heat	±3%

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

FCR	0805	J	1K0
Common Part	**Size**	**Tolerance**	**Value**
FCR - Fusible Chip Resistor	0805 1206 2010	J - ±5%	1 Ohm (1000 milliohms) 1R0 50 Ohms (50 ohms) 50R 100 Ohms (100 ohms) 100R