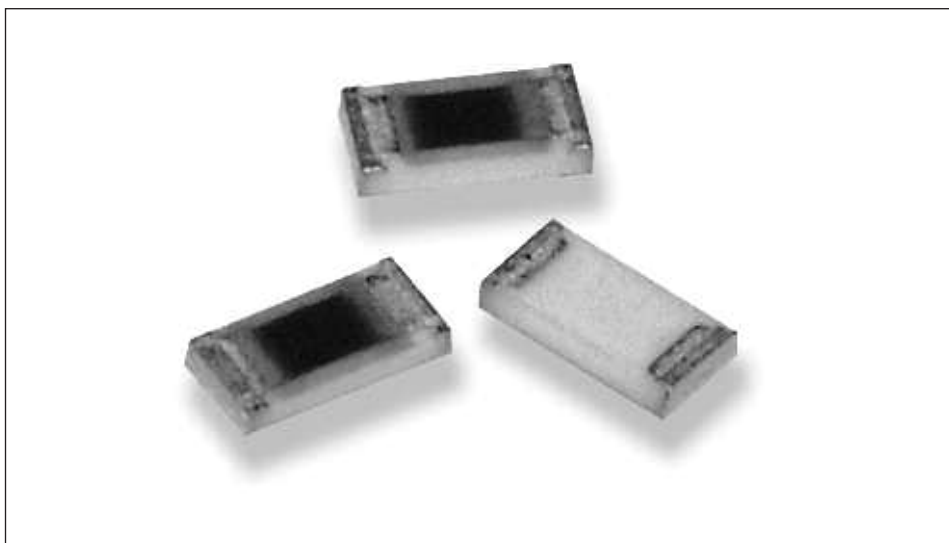


Type FCR Series

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 0603, 0805, 1206, 1210 and 2010
- FCR chip resistors are suitable for most applications, including high frequency operation



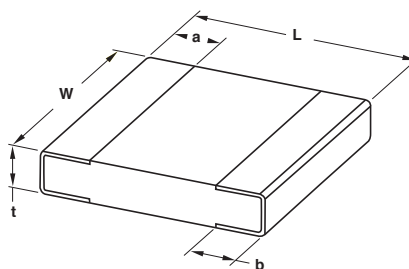
Precious metal terminations are screen printed onto a ceramic base and fired. The resistive element is screen printed and fired and the passivation layer added. Each resistor is trimmed to tolerance by sand blasting. The prescribed tile is broken into strips, the end plating is fired on and the strips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

Characteristics - Electrical

	Rated Wattage (70°C) (W)	Tolerance (%)	Resistance Range E-24 Series Standard (Ω)	TCR (ppm/°C)	Fusing Characteristic		
					Resistance (Ω)	Fusing Power (W)	Fusing Time (sec.)
0603	0.063	J ±5	5.6 ~ 33	±500	10 ~ 100	2.00	1<ts60
0805	0.100	J ±5	10 ~ 82	±500	10 ~ 100	2.50	
1206	0.125	J ±5	10 ~ 82	±500	10 ~ 100	2.50	
1210	0.250	J ±5	10 ~ 300	±500	10 ~ 27 30 ~ 300	3.75 3.00	
2010	0.500	J ±5	10 ~ 100	±500	10 ~ 100	4.50	

Operating temperature range -55 °C ~ +125 °C

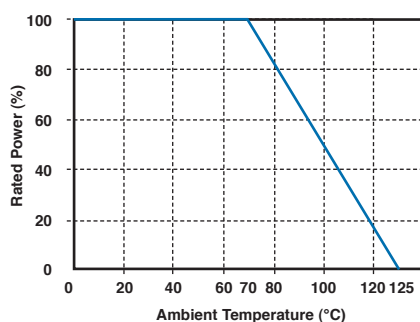
Dimensions



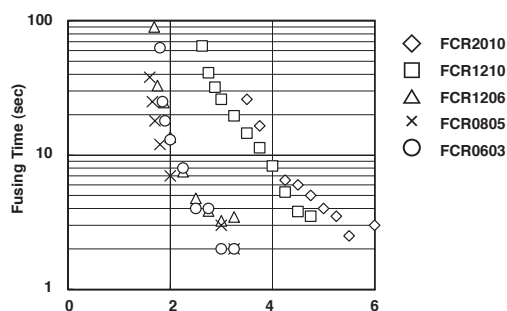
Type	L	W	t	a	b
FCR0603	1.6 ±0.15	0.8 +0.2/-0.1	0.5 +0.15/-0.05	0.25 ±0.20	0.25 ±0.20
FCR0805	2.00 +0.2/-0.1	1.25 +0.2/-0.1	0.5 +0.15/-0.05	0.4 ±0.2	0.4 ±0.2
FCR1206	3.2 +0.1/-0.15	1.60 +0.1/-0.15	0.55 +0.15/-0.05	0.5 ±0.2	0.5 ±0.2
FCR1210	3.2 +0.1/-0.15	3.6 +0.1/-0.15	0.55 +0.15/-0.05	0.5 ±0.2	0.5 ±0.2
FCR2010	5.00 ±0.15	2.50 ±0.20	0.56 ±0.15	0.60 ±0.25	0.60 ±0.25

Type FCR Series

Power Derating Curve



Fusing Characteristics



Mounting

The resistors are suitable for processing on automatic insertion equipment.

Marking

E24 series resistors are marked with a three digit code.

Packaging

FCR2010 supplied on reels of 4000 pieces. All others on reels of 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	1R0
Common Part	Size	Tolerance	Value
FCR - Fusible Chip Resistor	0603 0805 1206 1210 2010	J - ±5%	1 Ohm (1000 milliohms) 1R0 50 Ohms (50 ohms) 50R 100 Ohms (100 ohms) 100R