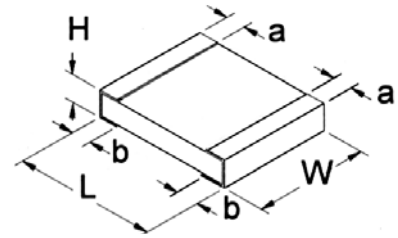


FCR Series — Trimmable Thick Film Chip Resistors

Features

- YAG laser user-trimmable in circuit
- Available in a variety of pre-trim tolerance ranges
- TCR of $\pm 200 \text{ ppm}/^\circ\text{C}$
- RoHS compliant / lead-free



Electrical Specifications

Type / Code	Package Type	Power Rating (Watts) @ 70°C	Maximum Working Voltage*	Maximum Overload Voltage	Resistance Temperature Coefficient	Ohmic Range and Tolerance				
						5%	10%	15%	0/-20%	0/-30%
FCR 1/16	0603	0.063W	50V	100V	$\pm 200 \text{ ppm}/^\circ\text{C}$	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M
FCR 1/10	0805	0.100W	100V	200V	$\pm 200 \text{ ppm}/^\circ\text{C}$	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M
FCR 1/8	1206	0.125W	200V	400V	$\pm 200 \text{ ppm}/^\circ\text{C}$	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M
FCR 1/4	1210	0.330W	200V	400V	$\pm 200 \text{ ppm}/^\circ\text{C}$	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M
FCR 1/2	2010	0.500W	200V	400V	$\pm 200 \text{ ppm}/^\circ\text{C}$	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M	10 Ω – 1M

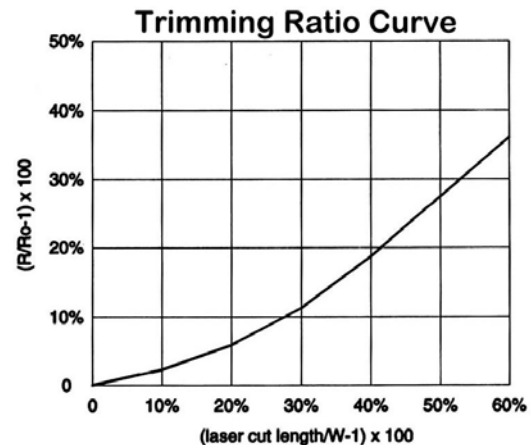
* Lesser of $\sqrt{\text{PR}}$ or maximum working voltage.

Mechanical Specifications

Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Units
FCR 1/16	0.063 \pm 0.006 1.60 \pm 0.15	0.031 \pm 0.006 0.80 \pm 0.15	0.018 \pm 0.004 0.45 \pm 0.10	0.012 \pm 0.008 0.30 \pm 0.20	0.012 \pm 0.008 0.30 \pm 0.20	inches mm
FCR 1/10	0.079 \pm 0.008 2.00 \pm 0.20	0.050 \pm 0.004 1.25 \pm 0.10	0.020 \pm 0.004 0.50 \pm 0.10	0.016 \pm 0.008 0.40 \pm 0.20	0.016 \pm 0.008 0.40 \pm 0.20	inches mm
FCR 1/8	0.126 \pm 0.008 3.20 \pm 0.05/-0.20	0.063 \pm 0.002/-0.006 1.60 \pm 0.05/-0.15	0.024 \pm 0.004 0.60 \pm 0.10	0.020 \pm 0.010 0.50 \pm 0.25	0.020 \pm 0.012 0.50 \pm 0.30	inches mm
FCR 1/4	0.126 \pm 0.008 3.20 \pm 0.20	0.098 \pm 0.008/-0.004 2.50 \pm 0.20/-0.10	0.024 \pm 0.004 0.60 \pm 0.10	0.020 \pm 0.010 0.50 \pm 0.25	0.0220 \pm 0.008 0.50 \pm 0.20	inches mm
FCR 1/2	0.197 \pm 0.006 5.00 \pm 0.15	0.098 \pm 0.006 2.50 \pm 0.15	0.021 \pm 0.006 0.55 \pm 0.15	0.024 \pm 0.010 0.60 \pm 0.25	0.024 \pm 0.010 0.60 \pm 0.25	inches mm

Performance Characteristics

Test	Test Results (JIS C 5202)
Load Life in Moisture	$\pm 3\%$
Temperature Cycle	$\pm 1\%$
Load Life	$\pm 3\%$
Resistance to Solder Heat	$\pm 1\%$
Terminal Adhesion	$\pm 1\%$
Short Time Overload	$\pm 2\%$
Operating Range	-55°C to +125°C



How to Order

FCR			1/10		47K		10%		R		
SEI Type			Code		Nominal Resistance		Tolerance		Packaging		
Code	Wattage	Size	Tolerance	Values	SEI Types	Pkg Qty	Description	Code			
1/16	0.063W	0603	10%	E24	1/16, 1/10, 1/8	5,000	7" - Paper	R			
1/10	0.100W	0805	20%	E24			7" - Paper	I			
1/8	0.125W	1206	0/-20%	E24		1/4, 1/2	4,000	7" - Emboss	R		
1/4	0.250W	1210	0/-30%	E24							
1/2	0.500W	2010									