# Stackpole Electronics, Inc. Resistive Product Solutions

Trimmable Thick Film Chip Resistor

### Features:

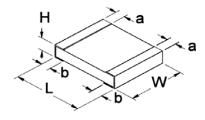
- YAG laser user-trimmable in circuit
- Available in a variety of pre-trim tolerance ranges
- TCR of ±200ppm/°C
- RoHS compliant and halogen free



Electrical Specifications							
Type / Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage (が <sup>)</sup>	Maximum Overload Voltage (V)	Resistance Temperature Coefficient	Ohmic Range (Ω)		
FCR0402	0.063W	50V	100V		10 - 1M		
FCR0603	0.1W	50V	100V				
FCR0805	0.125W	100V	200V				
FCR1206	0.25W	200V	400V	±200 ppm/°C			
FCR1210	0.33W	200V	400V				
FCR2010	0.75W	200V	400V				
FCR2512	1W	200V	400V				

<sup>(1)</sup> Lesser of √P\*R or maximum working voltage.

# **Mechanical Specifications**

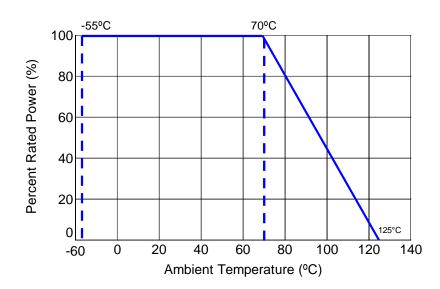


Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Unit
FCR0402	0.039 ± 0.002	$0.020 \pm 0.002$	0.014 ± 0.002	0.008 ± 0.004	0.010 ± 0.004	inches
	1.00 ± 0.05	$0.50 \pm 0.05$	0.35 ± 0.05	0.20 ± 0.10	0.25 ± 0.10	mm
FCR0603	0.063 ± 0.006	0.031 ± 0.006	0.018 ± 0.004	0.012 ± 0.008	0.012 ± 0.008	inches
	1.60 ± 0.15	0.80 ± 0.15	0.45 ± 0.10	0.30 ± 0.20	0.30 ± 0.20	mm
FCR0805	0.079 ± 0.008	$0.049 \pm 0.004$	0.020 ± 0.004	0.016 ± 0.008	0.016 ± 0.008	inches
	2.00 ± 0.20	$1.25 \pm 0.10$	0.50 ± 0.10	0.40 ± 0.20	0.40 ± 0.20	mm
FCR1206	0.126 ± 0.010	0.063 ± 0.010	0.024 ± 0.004	0.020 ± 0.010	0.020 ± 0.012	inches
	3.20 ± 0.20	1.60 ± 0.15	0.60 ± 0.10	0.50 ± 0.25	0.50 ± 0.30	mm
FCR1210	0.126 ± 0.008	$0.098 \pm 0.008$	0.024 ± 0.004	0.020 ± 0.010	0.020 ± 0.008	inches
	3.20 ± 0.20	$2.50 \pm 0.20$	0.60 ± 0.10	0.50 ± 0.25	0.50 ± 0.20	mm
FCR2010	0.197 ± 0.006	0.098 ± 0.006	0.024 ± 0.004	0.024 ± 0.010	0.024 ± 0.010	inches
	5.00 ± 0.15	2.50 ± 0.15	0.60 ± 0.10	0.60 ± 0.25	0.60 ± 0.25	mm
FCR2512	0.248 ± 0.008	0.126 ± 0.008	0.024 ± 0.004	0.028 ± 0.008	0.028 ± 0.008	inches
	6.30 ± 0.20	3.20 ± 0.20	0.60 ± 0.10	0.70 ± 0.20	0.70 ± 0.20	mm

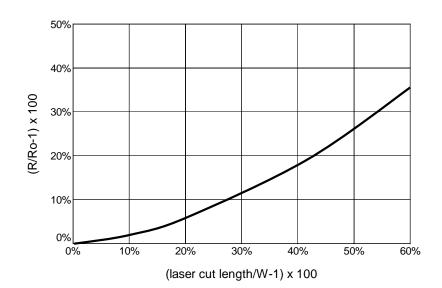
Performance Characteristics				
Test	Test Results (JIS C 5202)			
Load Life in Moisture	±3%			
Temperature Cycle	±1%			
Load Life	±3%			
Resistance to Solder Heat	±1%			
Terminal Adhesion	±1%			
Short Time Overload	±2%			

Operating Temperature Range: -55°C to +125°C

# **Power Derating Curve:**



## Trimming Ratio Curve:



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## RoHS Compliance

Stackpole Electronics has joined the worldwide effort to reduce the amount of lead in electronic components and to meet the various regulatory requirements now prevalent, such as the European Union's directive regarding "Restrictions on Hazardous Substances" (RoHS 2). As part of this ongoing program, we periodically update this document with the status regarding the availability of our compliant components. All our standard part numbers are compliant to EU Directive 2011/65/EU of the European Parliament.

	RoHS Compliance Status						
Standard Product Series	Description	Package / Termination Type	Standard Series RoHS Compliant	Lead-Free Termination Composition	Lead-Free Mfg. Effective Date (Std Product Series)	Lead-Free Effective Date Code (YY/WW)	
FCR	Trimmable Thick Film Surface Mount Chip Resistor	SMD	YES(1)	100% Matte Sn over Ni	Jan-04	04/01	

Note (1): RoHS Compliant by means of exemption 7c-I.

#### "Conflict Metals" Commitment

We at Stackpole Electronics, Inc. are joined with our industry in opposing the use of metals mined in the "conflict region" of the Eastern Democratic Republic of the Congo (DRC) in our products. Recognizing that the supply chain for metals used in the electronics industry is very complex, we work closely with our own suppliers to verify to the extent possible that the materials and products we supply do not contain metals sourced from this conflict region. As such, we are in compliance with the requirements of Dodd-Frank Act regarding Conflict Minerals.

### Compliance to "REACH"

We certify that all passive components supplied by Stackpole Electronics, Inc. are SVHC (Substances of Very High Concern) free and compliant with the requirements of EU Directive 1907/2006/EC, "The Registration, Evaluation, Authorization and Restriction of Chemicals", otherwise referred to as REACH. Contact us for complete list of REACH Substance Candidate List.

#### **Environmental Policy**

It is the policy of Stackpole Electronics, Inc. (SEI) to protect the environment in all localities in which we operate. We continually strive to improve our effect on the environment. We observe all applicable laws and regulations regarding the protection of our environment and all requests related to the environment to which we have agreed. We are committed to the prevention of all forms of pollution.

