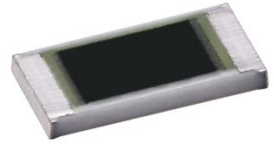


- Features:
- YAG laser user-trimmable in circuit
 - Available in a variety of pre-trim tolerance ranges
 - TCR of $\pm 200 \text{ ppm}/^\circ\text{C}$
 - RoHS compliant and halogen-free



| Electrical Specifications | | | | | |
|---------------------------|--------------------------------|---|---------------------------------|---------------------------------------|--------------------------|
| Type / Code | Power Rating (Watts) @ 70°C | Maximum Working Voltage (\sqrt{P}) | Maximum Overload Voltage (V) | Resistance Temperature Coefficient | Ohmic Range (Ω) |
| FCR0402 | 0.063W | 50V | 100V | $\pm 200 \text{ ppm}/^\circ\text{C}$ | 10 - 1M |
| FCR0603 | 0.1W | 50V | 100V | | |
| FCR0805 | 0.125W | 100V | 200V | | |
| FCR1206 | 0.25W | 200V | 400V | | |
| FCR1210 | 0.33W | 200V | 400V | | |
| FCR2010 | 0.75W | 200V | 400V | | |
| FCR2512 | 1W | 200V | 400V | | |

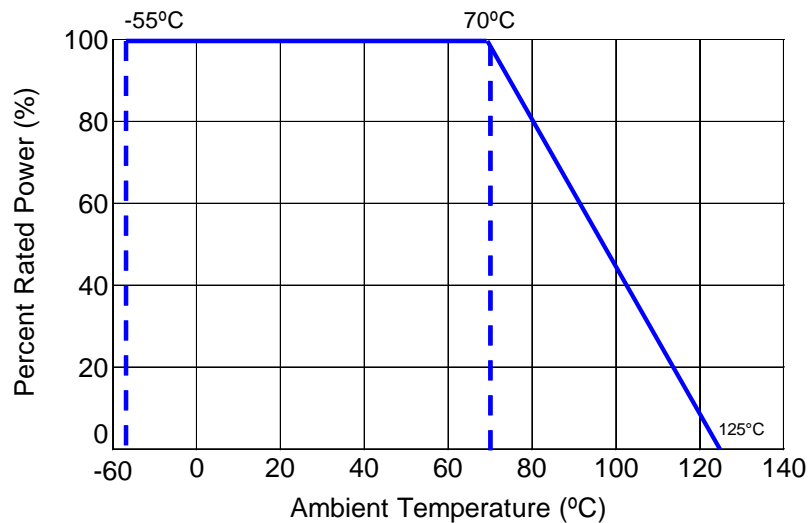
(1) Lesser of $\sqrt{P \cdot R}$ or maximum working voltage.

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

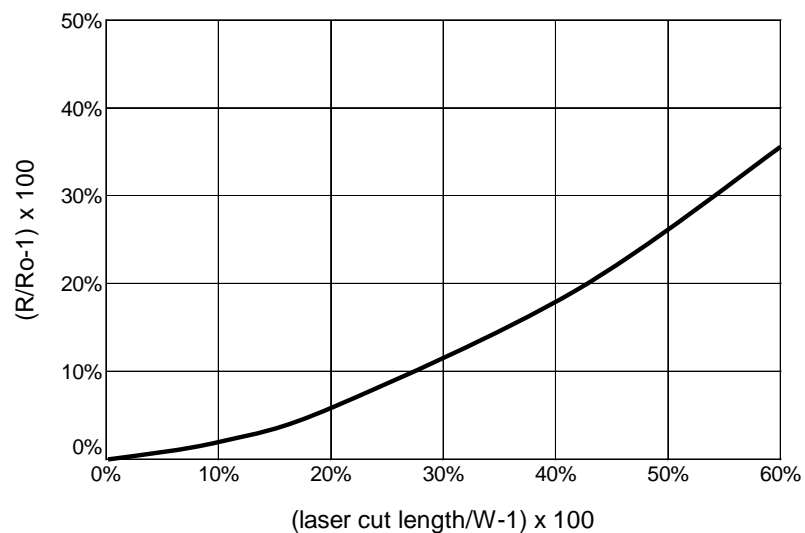
| Performance Characteristics | |
|-----------------------------|---------------------------|
| Test | Test Results (JIS C 5202) |
| Load Life in Moisture | ±3% |
| Temperature Cycle | ±1% |
| Load Life | ±3% |
| Resistance to Solder Heat | ±1% |
| Terminal Adhesion | ±1% |
| Short Time Overload | ±2%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

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

Power Derating Curve:



Trimming Ratio Curve:



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.

How to Order

| | | | | | | | | | | | | |
|----------------|-----------|------|--------|-----------|----------|-------|------------------------|----------------------|------------|----------|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| F | C | R | 0 | 8 | 0 | 5 | K | T | 4 | 7 | K | 0 |
| Product Series | | Size | Power | Tolerance | | | Packaging | | | | Resistance Value | |
| FCR | Trimmable | 0402 | 0.063W | Code | Tol | Value | Code | Description | Size | Quantity | Four characters with the multiplier used as the decimal holder. 10 ohm = 10R0 10 Kohm = 10K0 1 Mohm = 1M00 | |
| | | 0603 | 0.1W | K | ±10 | E24 | T | 7" Reel - Paper Tape | 0402 | 10,000 | | |
| | | 0805 | 0.125W | L | ±15 | | | | 0603, 0805 | 5,000 | | |
| | | 1206 | 0.25W | M | ±20 | | | | 1206, 1210 | | | |
| | | 1210 | 0.33W | N | ±30 | | 7" Reel - Plastic Tape | 2010, 2512 | 4,000 | | | |
| | | 2010 | 0.75W | S | 0 ~ -5% | | | | | | | |
| | | 2512 | 1W | U | 0 ~ -10% | | | | | | | |
| | | | | V | 0 ~ -20% | | | | | | | |
| | | | | W | 0 ~ -30% | | | | | | | |
| | | | | | | | | | | | | |