

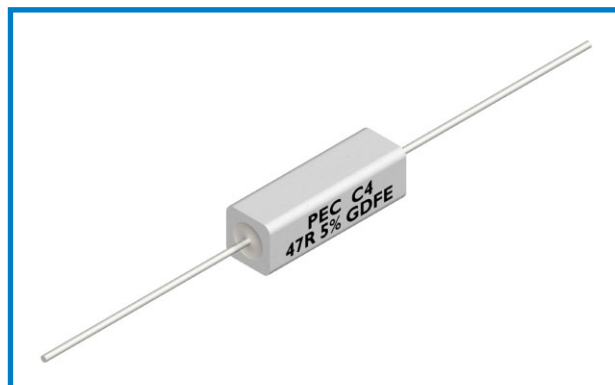


Square Ceramic Cased, Axial

Series PCA

Key Features

- 4W to 17W Power Rating.
- Square Ceramic Encased.
- Low Surface Temperature.
- Non-Flammable Construction.
- High Insulation Resistance.
- High Surge Versions.
- Performance Reference Standards.
 - IEC 115-1



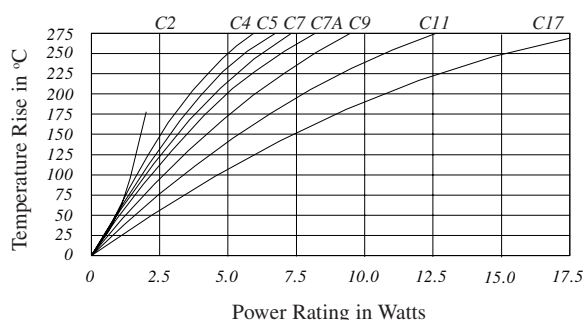
Electrical Specifications and Environmental Characteristics

| Type | Power @70°C Watts | Ohmic Range Ohms | | Additional Specifications | |
|------|-------------------------|---------------------|-----|---|--|
| | | Min | Max | Tolerance | Values $\leq 10\Omega \pm 10\%$, $>10\Omega \pm 5\%$; On request $\pm 2\%$. |
| C2 | 2 | 0R05 | 3K9 | Applicable E-Series | E24(5%), E12(10%); Other values on request |
| C4 | 4 | 0R1 | 6K8 | Derating | From 70°C to 350°C |
| C5 | 5 | 0R33 | 10K | TCR -Low Values, IEC 115-1, Cls. 4.8.4.2 and 2.2.20.2 | 450ppm/°C (Max) |
| C7 | 7 | 0R47 | 22K | TCR -Mid Values & High Values | Std : $<150\text{ppm}/^\circ\text{C}$; On Request : $50\text{ppm}/^\circ\text{C}$, $20\text{ppm}/^\circ\text{C}$ |
| C7A | 7 | 0R33 | 10K | Temperature Range | -55°C to 350°C |
| C9 | 9 | 0R47 | 22K | Climatic Category | 55 / 200 / 56 |
| C11 | 11 | 0R82 | 22K | Solderability | 95% Coverage MIL Std. 202F, Test 208 |
| C17 | 17 | 1R5 | 27K | Solvent Resistance | Per IEC 115-1, Clause 4.30 (Test XA of IEC 68-2-45) |

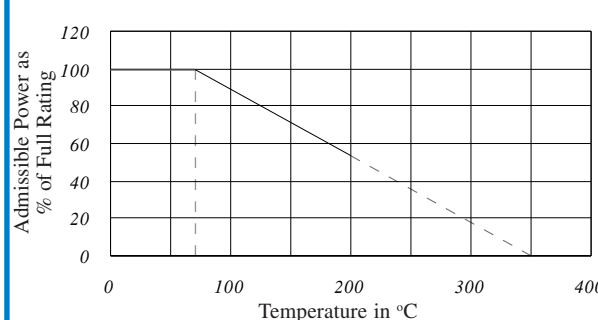
Performance Characteristics

| Test Methods | Test Conditions | Test Limits |
|--------------------------------|--|-------------------------|
| Insulation Resistance | At 500V DC, IEC 115-1, Clauses-4.6, 2.2.19 | 10000 M Ω |
| Dielectric Strength | 2000Vpeak for 1 min, IEC 115-1, Clause 2.2.17 | No Break Down |
| Terminal Strength | Tensile Test, IEC 115-1, Clause 4.16, Test Ua ₁ , IEC 68-2-21 | $>50\text{N}$ |
| Solderability | As per MIL-STD 202F, Test 208; IEC 115-1, Clause 4.17.3 | 95% Coverage |
| Endurance at Rated Temperature | Rated Power @70°C(1.5hrs ON, 0.5hrs OFF), IEC 115-1, Clause 4.25 | $\Delta R < 5\% + 0R05$ |
| Damp Heat Steady State | 90-95% RH @40°C Ambient Temp. for 56 days, IEC 115-1, Clause 4.24 | $\Delta R < 5\% + 0R05$ |
| Resistance to Soldering Heat | 10 Seconds Dip in Solder Bath at 260°C, IEC 115-1, Clause 4.18 | $\Delta R < 1\% + 0R05$ |
| Climatic Sequence | As per IEC 115-1, Clause 4.23 | $\Delta R < 5\% + 0R05$ |

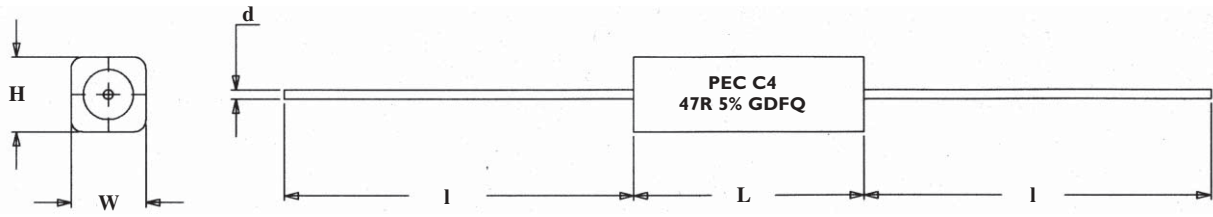
Temperature Rise Graphs



Derating Curve²



Dimensions



Do not Scale Drawings.
All dimensional tolerances in mm.

Dimensions (mm)

| Type | L | W | H | I | d |
|------|----------|-------|-------|------|------|
| | | ± 0.5 | ± 0.5 | | |
| C2 | 15 ± 1.0 | 6.4 | 6.4 | 36.0 | 0.80 |
| C4 | 20 ± 1.0 | 6.4 | 6.4 | 36.0 | 0.80 |
| C5 | 25 ± 1.0 | 6.4 | 6.4 | 36.0 | 0.80 |
| C7 | 38 ± 1.0 | 6.4 | 6.4 | 36.0 | 0.80 |
| C7A | 25 ± 1.0 | 9.0 | 9.0 | 36.0 | 0.80 |
| C9 | 38 ± 1.0 | 9.0 | 9.0 | 36.0 | 0.80 |
| C11 | 50 ± 1.5 | 9.0 | 9.0 | 36.0 | 0.80 |
| C17 | 75 ± 2.0 | 9.0 | 9.0 | 36.0 | 0.80 |

Dimensions (Inches)

| Type | L | W | H | I | d |
|------|---------------|--------|--------|-------|--------|
| | | ± 0.02 | ± 0.02 | | |
| C2 | 0.590 ± 0.039 | 0.251 | 0.251 | 1.417 | 0.0314 |
| C4 | 0.787 ± 0.039 | 0.251 | 0.251 | 1.417 | 0.0314 |
| C5 | 0.984 ± 0.039 | 0.251 | 0.251 | 1.417 | 0.0314 |
| C7 | 1.496 ± 0.039 | 0.251 | 0.251 | 1.417 | 0.0314 |
| C7A | 0.984 ± 0.039 | 0.354 | 0.354 | 1.417 | 0.0314 |
| C9 | 1.496 ± 0.039 | 0.354 | 0.354 | 1.417 | 0.0314 |
| C11 | 1.968 ± 0.059 | 0.354 | 0.354 | 1.417 | 0.0314 |
| C17 | 2.952 ± 0.078 | 0.354 | 0.354 | 1.417 | 0.0314 |

To Order - Please Specify

| PEC Type. | Ohmic Value | Tolerance | Packing Style* | Release Condition | Standard / Non-Std. Leads | TCR |
|-----------|---------------------|-----------|-----------------|-------------------|---|--|
| C4 | 0.1 Ohm » 0R1 / R10 | 2% » G | Bulk » B | Commercial » X | Standard » S 38mm / 1.5" » L Others » M Please Specify | Standard » S Others » M Please Specify |
| | 1 Ohm » 1R0 | 5% » J | Tape & Reel » T | | | |
| | 1 KOhm » 1K0 | 10% » K | Ammo » A | | | |
| | 10.7 KOhm » 10K7 | | | | | |

A Sample Part No.: **C4 47R JBXSS**

* C2, C4, C5 can be supplied in Style B/T/A & All other types can be only supplied in Style B.

Notes

- On request we undertake tests for Batch Acceptance to a specified Reference Standard.
- The Derating Curve specifies the maximum allowable Power at a particular ambient temperature while ensuring that the maximum surface temperature remains within the designed limit.
- When the Resistor is subjected to a Pulse Load, please ensure that the *average* Power dissipated remains below the rated Power specified.
- Resistor performance with Pulse Loads will have to be application tested. Please utilise our Pulse Application Questionnaire for selecting a suitable type or for requesting any design-in assistance from us.

Marketing Director
John A Stooke

Phone : +44 1793 737269
Mobile : +44 7836 609360
johnstooke@peccomponents.com

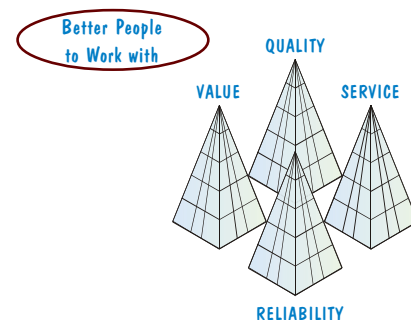
Global Sales Co-ordinator
K. K. Sajeev

Phone : +91 40 27126228 (Ext 213)
Mobile : +91 98666 55628
sales@peccomponents.com

European Sales
Gerhard Phalke

Phone : +49 8445 9299 755
Mobile : +49 151 55005510
pec@gerhard-pahlke.de

To offer our products through regionally trusted services we have territory-wise and product-wise distribution, franchising, resale and private brand labelling arrangements. For cost-effective and enduring solutions to your needs, for tailored stocking/delivery scheduling, logistics and administrative support, please do not hesitate to contact us or any of our associated representatives, coordinators and product specialists.



Thoughtful engineering and production by a well trained work-force, backed by strong design and development skills, enable us to maintain a level of manufacture and service recognised internationally.
At PEC we offer well-tuned customised support.