

# Chip Attenuators

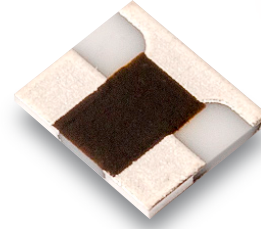
## PCAAF Series: DC-8 GHz

The PCAAF Series Chip Attenuators consist of

a laser trimmed distributed thin film element on

an alumina ceramic substrate with a protective

paint layer and solderable terminals.



### FEATURES

- Solderable terminals
- SN62, SN96, Gold terminals available
- 0-20 dB values
- S-parameter data files and Modelithics Global Models™
- RoHS Compliant
- Design kits available

### GENERAL SPECIFICATIONS

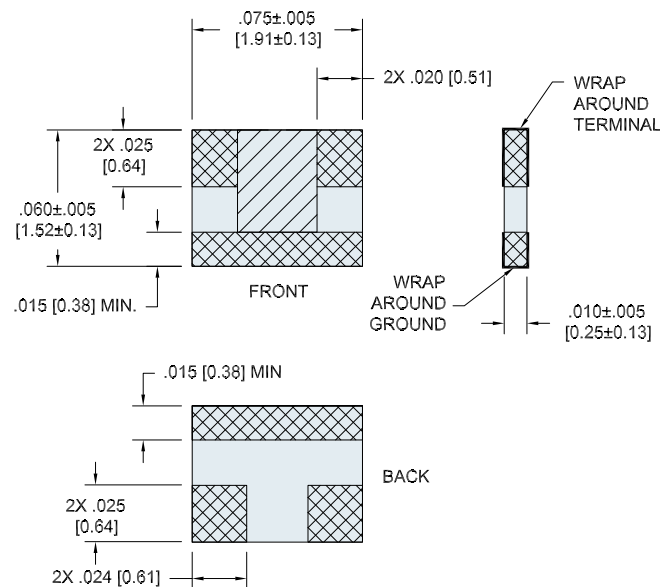
Resistive Element: Proprietary Thin Film

Substrate: Alumina

Terminal Finish: Electroplated Silver over Nickel

Attenuation Stability:  $\pm 0.0001$  dB/dB/°C

Operating Temperature Range: -55°C to +150°C



### ELECTRICAL SPECIFICATIONS

| Model Number | dB Value | Attenuation Accuracy <sup>1</sup> (dB) |           | Max VSWR |        | Power Rating <sup>2</sup> (Watts) |
|--------------|----------|----------------------------------------|-----------|----------|--------|-----------------------------------|
|              |          | DC-4GHz                                | 4-8GHz    | DC-4GHz  | 4-8GHz |                                   |
| PCAAF - 0    | 0        | +0.5/-0                                | +0.5/-0   | 1.25     | 1.35   | 5.0                               |
| PCAAF - 1    | 1        | $\pm 0.5$                              | $\pm 0.5$ | 1.25     | 1.35   | 5.0                               |
| PCAAF - 2    | 2        | $\pm 0.5$                              | $\pm 0.5$ | 1.25     | 1.35   | 2.0                               |
| PCAAF - 3    | 3        | $\pm 0.5$                              | $\pm 0.5$ | 1.25     | 1.35   | 2.0                               |
| PCAAF - 4    | 4        | $\pm 0.5$                              | $\pm 0.5$ | 1.25     | 1.35   | 2.0                               |
| PCAAF - 5    | 5        | $\pm 0.5$                              | $\pm 0.5$ | 1.25     | 1.35   | 2.0                               |
| PCAAF - 6    | 6        | $\pm 0.5$                              | $\pm 0.5$ | 1.25     | 1.35   | 1.0                               |
| PCAAF - 7    | 7        | $\pm 0.5$                              | $\pm 0.5$ | 1.25     | 1.35   | 1.0                               |
| PCAAF - 8    | 8        | $\pm 0.5$                              | $\pm 0.5$ | 1.25     | 1.35   | 1.0                               |
| PCAAF - 9    | 9        | $\pm 0.5$                              | $\pm 0.5$ | 1.25     | 1.35   | 1.0                               |
| PCAAF - 10   | 10       | $\pm 0.5$                              | $\pm 0.5$ | 1.25     | 1.35   | 1.0                               |
| PCAAF - 12   | 12       | $\pm 0.75$                             | +0.5/-3   | 1.25     | 1.35   | 0.75                              |
| PCAAF - 15   | 15       | $\pm 0.75$                             | +0.5/-3   | 1.25     | 1.35   | 0.75                              |
| PCAAF - 20   | 20       | $\pm 1.0$                              | +0.5/-4   | 1.25     | 1.35   | 0.75                              |

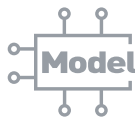
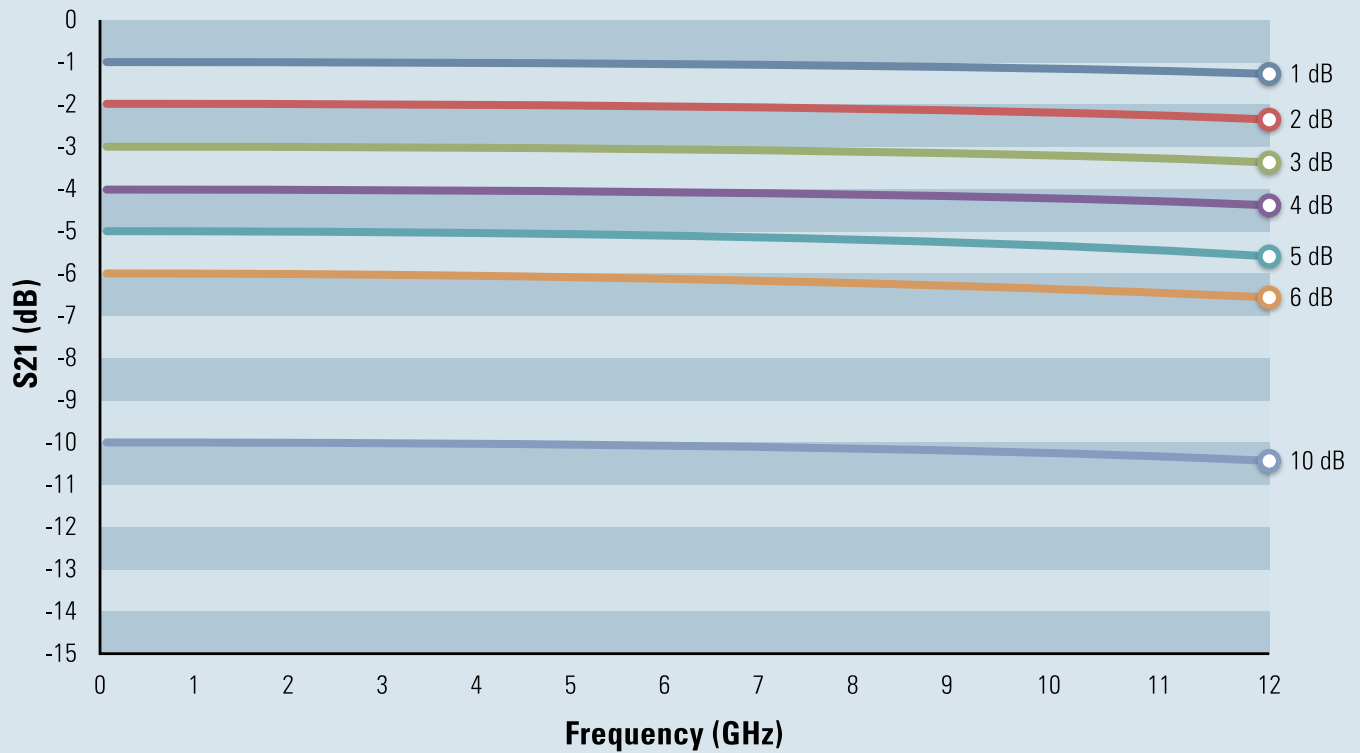
<sup>1</sup>Performance is based on device mounted in matched 50Ω line. <sup>2</sup>Assumes 100° C mounting temperature derated linearly to 0 Watts at 150° C

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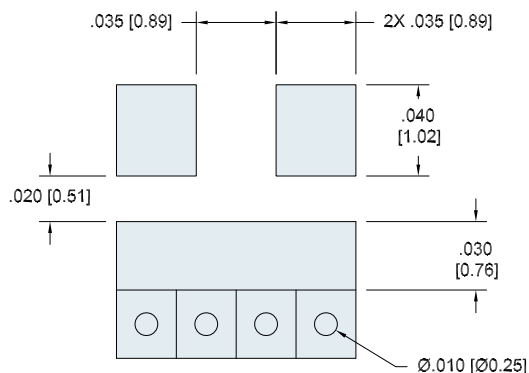
## PCAAF Series: DC-8 GHz



ATTENUATION VS. FREQUENCY



PC BOARD LAYOUT



ORDERING KEY

Model Number

**PCAAF-T3** — dB Value

Terminal Options

- = Silver over Nickel [standard]
- T** = Tin Lead Solder
- H** = Lead Free Solder
- G** = Gold Plated



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