

Temperature Variable Chip Attenuators

TCAF N05 Series: DC-12GHz

Designed to vary $-.005\text{dB/dB/}^{\circ}\text{C}$ to compensate

for temperature induced system gain variation

without requiring a bias or control voltage.

These surface mount attenuators consist of

laser trimmed thick film resistor elements on an

alumina ceramic substrate with a protective paint

layer and are available in various metallization

styles and plating options.



FEATURES

- 12GHz operation
- 2 thru 6 dB values (initially)
- Reduced attenuation at higher temperatures
- Solderable terminals
- SN62, SN96, Gold terminals available
- RoHS compliant
- Design kits available

GENERAL SPECIFICATIONS

Resistive Element: Proprietary Thick Film

Substrate: Alumina

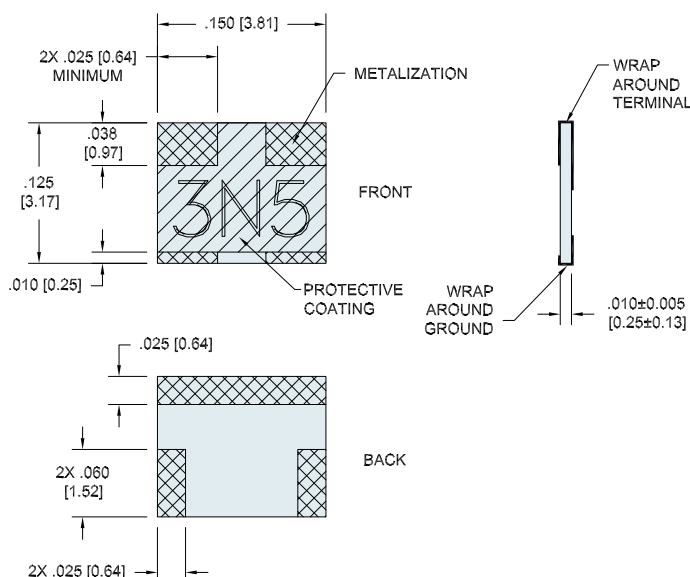
Terminal Finish: Electroplated Silver over Nickel

Temp Coefficient of Attenuation: $-.005\text{ dB/dB/}^{\circ}\text{C}$

Temp Coefficient Tolerance: $.001\text{ dB/dB/}^{\circ}\text{C}$

Operating Temperature Range: -55°C to $+150^{\circ}\text{C}$

Rated Power¹: 2 W average



ELECTRICAL SPECIFICATIONS

Model Number	dB Value	Attenuation Accuracy ² (dB)		Max VSWR	
		DC-8GHz	8-12GHz	DC-8GHz	8-12GHz
TCAF-2-N05	2	± 0.5	± 0.75	1.35:1	1.50:1
TCAF-3-N05	3	± 0.5	± 0.75	1.35:1	1.50:1
TCAF-4-N05	4	± 0.5	± 0.75	1.35:1	1.50:1
TCAF-5-N05	5	± 0.5	± 0.75	1.35:1	1.50:1
TCAF-6-N05	6	± 0.5	± 0.75	1.35:1	1.50:1

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

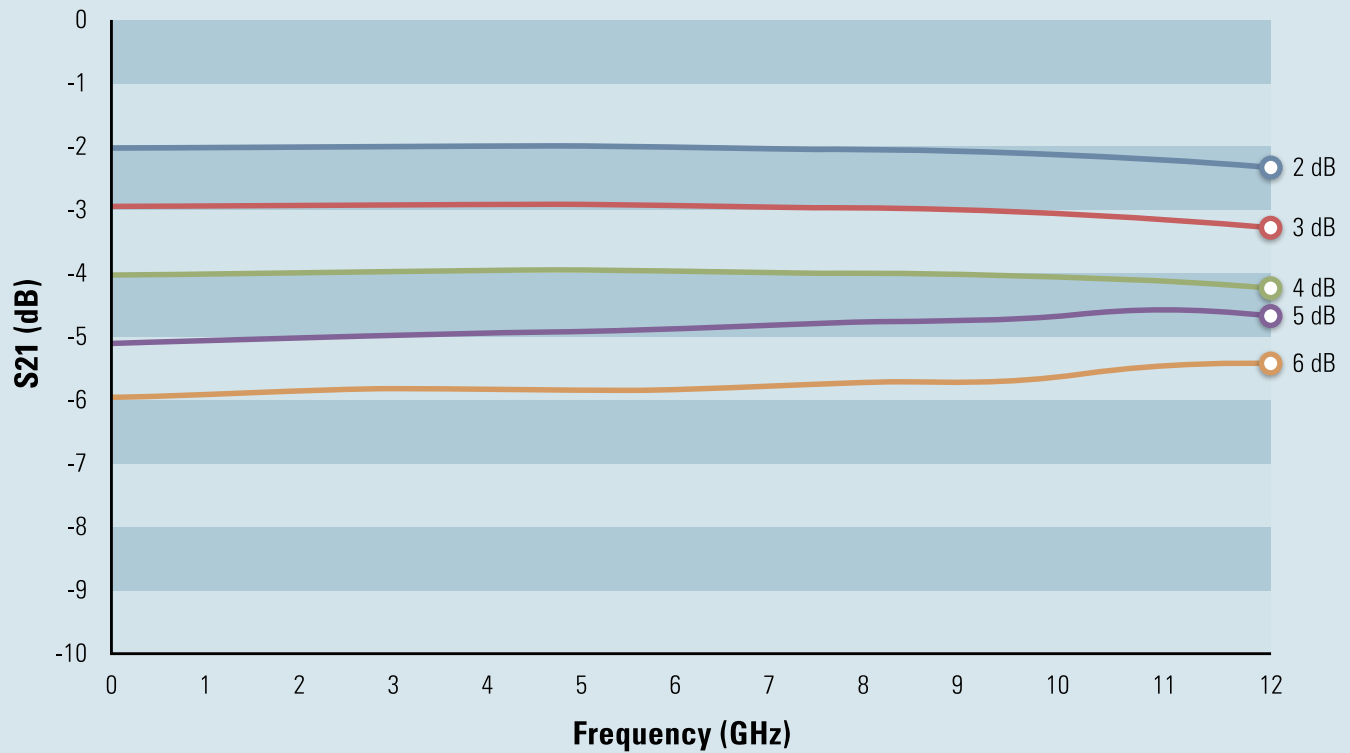
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A passion for performance.

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ATTENUATION VS. FREQUENCY



ORDERING KEY

Model Number

TCAF-T3-N05

dB Value

Temp Shift: Negative

Terminal Options:

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

Temp Coefficient of Attenuation:

.005dB/dB/°C



300 Dino Drive
Ann Arbor, MI 48103-9457
www.aeroflex.com/inmet
1-888-244-6638 or 734-426-5553