# **ATTENUATOR** TEMPERATURE VARIABLE



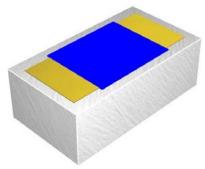


**DATA SHEET PART SERIES: AN11-XNXF**  SHEET 1 OF 2 Dwg 1014205 EN 14-2398

#### **FEATURES**

**APPLICATIONS** Temperature Variable **Power Amplifiers** Compact Package Instrumentation Wideband Performance Mobile Networks Point-to-Point Radios Passive Gain Compensation Rugged Construction MIL-PRF-3933

Satellite Communications Military Radios **Up/Down Converters** 



#### **GENERAL DESCRIPTION**

EMC Technology is the leading authority in temperature variable attenuators. Thermopad® temperature variable attenuators have been a highly reliable passive solution for over temperature gain compensation for more than 20 years. All Thermopad® products can be qualified for high-reliability and space applications.

# **ORDERING INFORMATION**

Part Identifier: **AN11-XNXF** Temp Coefficient of Attenuation Attenuation Value

## **SPECIFICATIONS**

#### 1.0 ELECTRICAL

Nominal Impedance: 50 ohms Frequency Range: DC - 6 GHz Attenuation Values Available: 1 and 2 dB

@ 25°C: ± 0.5 dB Attenuation Accuracy: VSWR: 1.30: typ 1.60:1 max

0.1 Watts Input Power

Temperature Coefficient of Attenuation:-0.003 and -0.005 dB/dB/°C

Temperature Coefficient Tolerance: ± 0.001 dB/dB/°C

### 2.0 ENVIRONMENTAL

-55°C to +150°C Operating Temperature: Non-operating Temperature: -65°C to +150°C

#### 3.0 MARKING

Unit Marking: None

#### 4.0 QUALITY ASSURANCE

Sample Inspect Per ANSI/ASQC Z1.4 General Inspection, Level II, AQL=1.0.

Visual and Mechanical Examination for Conformance to Outline Drawing Requirements

Sample Inspection (Destructive Testing).

Select three (3) units from lot and measure DCA every 20°C over the temperature range of

-55°C to +125°C; Calculate using linear regression, the slope of the curve.

Calculate TCA using the following formula:

Smiths microwave Form 423F119 Rev A Cage Codes: 24602 / 2Y194 www.emc-rflabs.com • +1 772-286-9300 Specifications are Subject to Change Without Notice AS 9100, ISO 9001 and 14001 Certified

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DATA SHEET PART SERIES: AN11-XNXF

SHEET 2 OF 2 Dwg 1014205 EN 14-2398 Revision -

$$TCA = \frac{Slope}{Attenuation @ 25^{\circ}C}$$

Inspection in accordance with 824W170 and 824F036, for commercial grade product.

Test Data Requirements:

No Data Required for Customer Data Retention – 24 Months

**5.0 PACKAGING** 

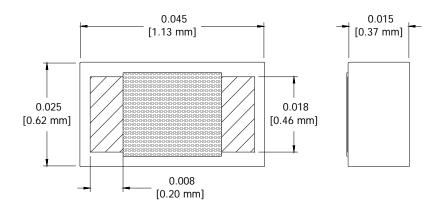
Standard: Tape and Reel

**6.0 MECHANICAL** 

Substrate Material: Alumina

Terminal Material: Thick Film ROHS Compliant

Resistive Element: Thick film



Unless Otherwise Specified: TOLERANCE:  $X.XX = \pm 0.XX$   $X.XXX = \pm 0.XXX$