

ATTENUATOR WIDEBAND TEMP VARIABLE



DATA SHEET

PART SERIES: WTVA0X00N0XWB2

SHEET 1 OF 3
Dwg 1009865

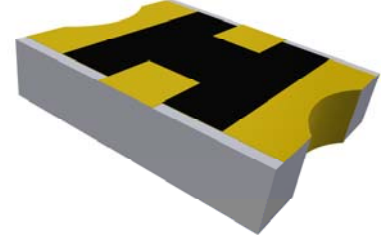
EN 16-0685
Revision M

FEATURES

Temperature Variable
Compact Package
Wideband Performance
Passive Gain Compensation
Rugged Construction
MIL-PRF-3933

APPLICATIONS

Power Amplifiers
Instrumentation
Mobile Networks
Point-to-Point Radios
Satellite Communications
Military Radios
Up/Down Converters

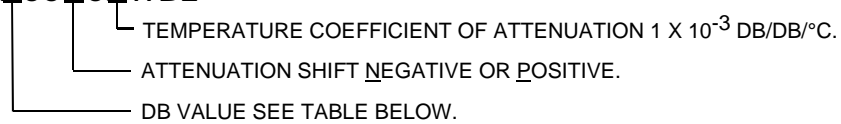


GENERAL DESCRIPTION

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: WTVA0X00N0XWB2



SPECIFICATIONS

1.0 ELECTRICAL

Nominal Impedance: 50 ohms
Frequency Range: DC - 20GHz

Attenuation Values Available:

SHIFT (NEG)	DB VALUE
-.007	2, 3, 4, 5, 6
-.006	2, 3, 4, 5, 6, 7
-.005	2, 3, 4, 5, 6
-.004	2, 3, 4, 5, 6
-.003	2, 3, 4, 5, 6

Attenuation Accuracy: @ 25°C: ± 0.5 dB @ 1GHz
VSWR: DC – 10GHz 1.25:1 MAX 10-20GHz 1.7:1 MAX AT 25°C.
Input Power: 0.2 Watts CW.
Temperature Coefficient of Attenuation: -0.003, -0.004, -0.005, -0.006, -0.007 dB/dB/°C
Temperature Coefficient Tolerance: ± 0.001 dB/dB/°C

2.0 ENVIRONMENTAL

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

3.0 MARKING

Unit Marking: None

ATTENUATOR WIDEBAND TEMP VARIABLE



DATA SHEET

PART SERIES: WTVA0X00N0XWB2

SHEET 2 OF 3
Dwg 1009865

EN 16-0685
Revision M

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:

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

Inspection in accordance with 824W107

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 96%, MIL-I- 10.

Terminal Material:

Thick Film, Bondable Gold

Workmanship

PER MIL-PRF-55342

Ground Plane:

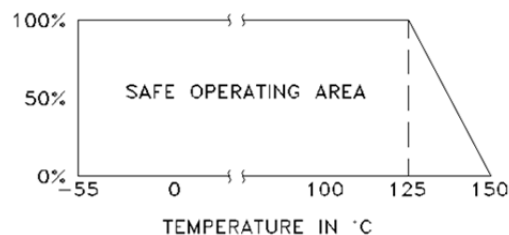
Thick film, solderable.

Resistive Element:

Thick film

Metric Dimensions:

Provided for reference only



ATTENUATOR WIDEBAND TEMP VARIABLE

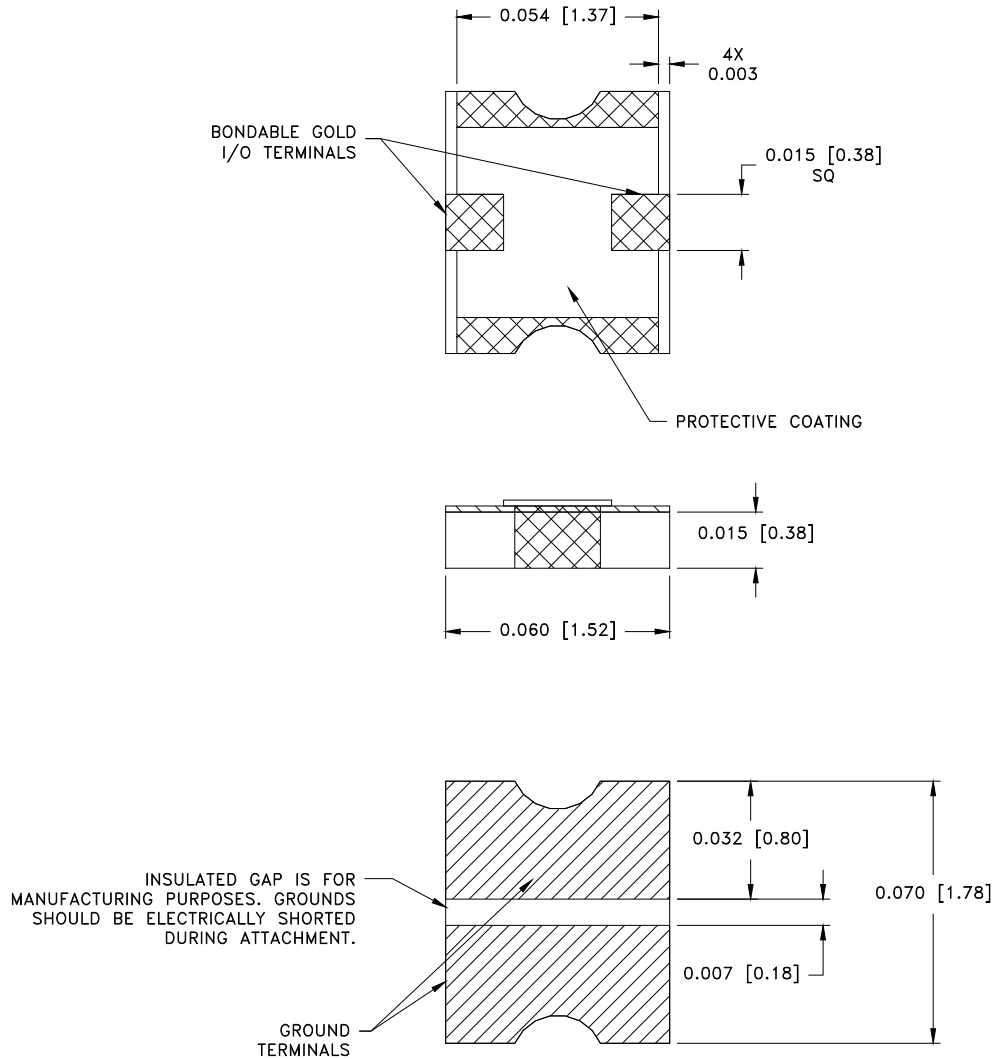


DATA SHEET

PART SERIES: WTVA0X00N0XWB2

SHEET 3 OF 3
Dwg 1009865

EN 16-0685
Revision M



Unless Otherwise Specified: TOLERANCE: X.XX = ± 0.XX X.XXX = ± 0.XXX