

## ATTENUATOR TEMPERATURE VARIABLE

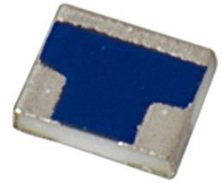
DATASHEET PART SERIES: MTVA0X00N0X

Sheet 1 of 3

ECO-084244

Doc# MTVA0X00N0X-1007725

Revision AK



## ORDERING INFORMATION

Part Identifier: MTVA0X00N0X

X-Temperature Coefficient of Attenuation  $1 \times 10^{-3}$  dB/dB/°C  
 N-Attenuation Shift Negative  
 X-dB Value

## SPECIFICATIONS

## 1.0 ELECTRICAL

Nominal Impedance:	50 $\Omega$
Frequency Range:	-.001 thru -.005 DC – 18 GHz -.006 thru -.009 DC – 12.4 GHz
Attenuation Values Available:	0-9 dB
Attenuation Accuracy:	@ 25°C: $\pm 0.5$ dB @ 1 GHz
VSWR:	1.30:1 Max @ 1 GHz
Input Power	200 milliwatts cw. Full Rated Power to 125°C, Derated Linearly to 0 watts @ 150°C.
Temperature Coefficient of Attenuation:	-0.001, -0.002, -0.003, -0.004, -0.005, -0.006, -0.007, -0.008, -0.009 dB/dB/°C
Temperature Coefficient Tolerance:	$\pm 0.001$ dB/dB/°C

## 2.0 ENVIRONMENTAL

Operating Temperature:	-55°C to +150°C
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## 3.0 MARKING

Unit Marking:	dB Value (X), Direction of Shift (N) and TCA Shift (X).
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## 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:

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

Inspection in accordance with 824W107

Test Data Requirements:

No Data Required for Customer

Data Retention – 24 Months

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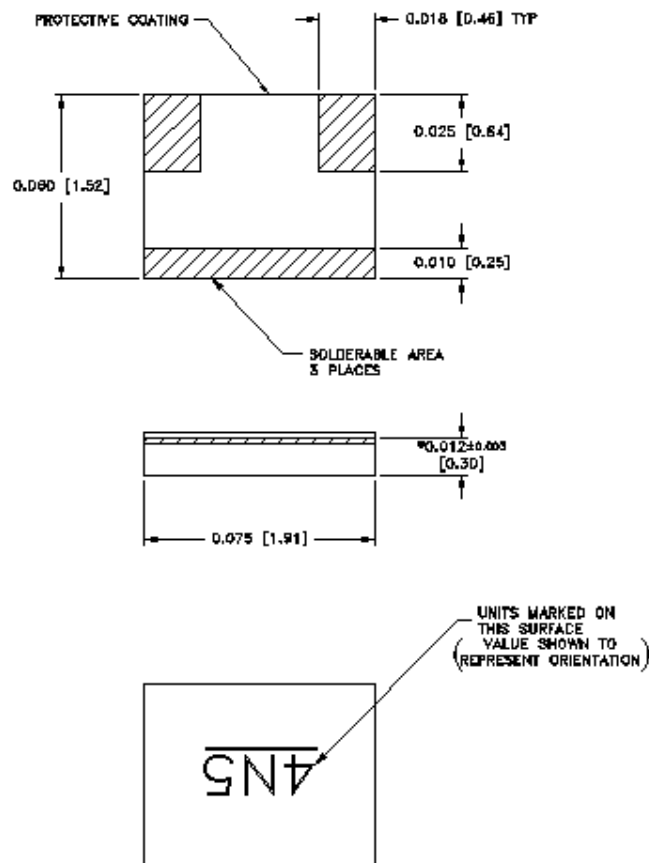
## 5.0 PACKAGING

Standard:

Tape &amp; Reel

## 6.0 MECHANICAL

Substrate Material: Alumina, 96% MIL-I-10  
 Terminal Material: Thick Film, Nickel Barrier, Solder Plated  
 Workmanship: Per MIL-PRF-55342  
 Resistive Element: Thick Film  
 Metric Dimensions: Provided for reference only



Unless Otherwise Specified: TOLERANCE: X.XXX = ± 0.005

7.0 FOOTPRINT

Part Number	Inches						mm					
	A	B	C	D	S	W	A	B	C	D	S	W
MTVA0X00N0X	0.022	0.028	0.041	0.013	0.026	0.075	0.56	0.71	1.04	0.33	0.66	1.91

