# ATTENUATOR HIGH RELIABILITY CHIP 2 WATT



DATA SHEET PART SERIES: HRTXXXXXXX

SHEET 1 OF 2 Dwg 1009705 EN 16-0741 Revision C

**FEATURES** 

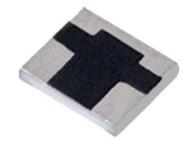
**APPLICATIONS** 

Small Footprint Mobile Networks High Power Broadcast

Surface Mount High Power Amplifiers
Low VSWR Isolators/Circulators

Easy Installation Military

Wide Attenuation Offering Instrumentation



## **GENERAL DESCRIPTION**

EMC Technology offers the widest selection of chip attenuators worldwide. We offer a line of fixed attenuators in a high-reliability S-level common platform for space, military, and aerospace designs. The standard parts eliminate the need for costly and time-consuming drawings and specifications meeting the specification and testing requirements of Mil-PRF-55342. Parts may be ordered 100% tested to Group A with the option to add Group B or Group C. With our smart part numbering system, companies may designate the level of testing they require simply by indicating Group A, B, & C at the appropriate location in the part number.

# ORDERING INFORMATION



# **SPECIFICATIONS**

# 1.0 ELECTRICAL

Nominal Impedance: 50 ohms Frequency Range: DC – 6 GHZ

Attenuation Values Available: 1 - 10 in 1 dB increments

Attenuation Accuracy @  $25^{\circ}$ C:  $\pm 0.5 \text{ dB}$  @ 1GHz VSWR: 1.30:1 Max. @ 1GHz

Input Power CW: Negative shifting: 2 watts cw

Positive shifting: 0.25 watts cw

Full rated power to 125°c, derated linearly to 0 watts at 150°c

Temperature Coefficient of Attenuation:-0.003, -0.004, -0.005, -0.006, -0.007, and -0.009 dB/dB/°C

.0.003, 0.005, 0.006, 0.007 and 0.008 dB/dB/°C

Temperature Coefficient Tolerance:  $\pm 0.001 \text{ dB/dB/}^{\circ}\text{C}$ 

#### 2.0 ENVIRONMENTAL

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

3.0 MARKING

Unit Marking: dB value (XX), direction of shift (N or P) and TCA shift (X).

# ATTENUATOR HIGH RELIABILITY CHIP 2 WATT



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SHEET 2 OF 2 Dwg 1009<u>705</u> EN 16-0741 Revision C

## 4.0 QUALITY ASSURANCE

Visual Inspection Performed per TP-8965.

Perform Group A, B and/or C testing as indicated by the part number per TP-8965.

Test Data requirements

Test data required for customer see TP-8965.

Data retention - 24 months

Test samples required for customer see TP-8965.

### 5.0 PACKAGING

Standard Packaging: Waffle Pack

## **6.0 MECHANICAL**

Substrate Material: Alumina, MIL-I-10

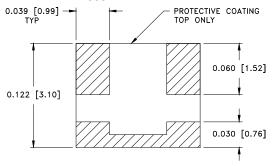
Resistive Film: Thick Film

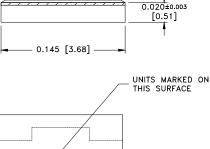
Terminal Material: Thick Film, Nickel Barrier, Solder Plated

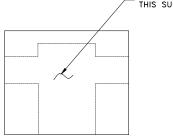
Metric Dimensions: Provided for reference only

Workmanship

PER MIL-PRF-55342







Unless Otherwise Specified: TOLERANCE:  $X.XXX = \pm 0.005$