

# ATTENUATOR

## HIGH RELIABILITY CHIP 2 WATT



DATA SHEET

PART SERIES: HRTXXXXXXXXS

SHEET 1 OF 2  
Dwg 1009715

EN 16-0741  
Revision C

### FEATURES

- Small Footprint
- High Power
- Surface Mount
- Low VSWR
- Easy Installation
- Wide Attenuation Offering

### APPLICATIONS

- Mobile Networks
- Broadcast
- High Power Amplifiers
- Isolators/Circulators
- Military
- Instrumentation

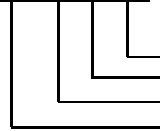


### GENERAL DESCRIPTION

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

Part Identifier: HRTXXXXXXXXS



- XX-TEMPERATURE COEFFICIENT OF ATTENUATION  $1 \times 10^3$  DB/DB/°C
- X- ATTENUATION SHIFT NEGATIVE OR POSITIVE.
- XX-TEST CODE: 0A=GROUP A; 0B=GROUP B; 0C=GROUP C
- XX-DB VALUE SEE TABLE

### 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°C:	± 0.5 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:	± 0.001 dB/dB/°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).

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## 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, 96%, MIL-I-10

Resistive Film:

Thick Film

Terminal Material:

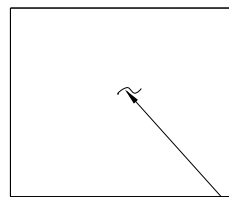
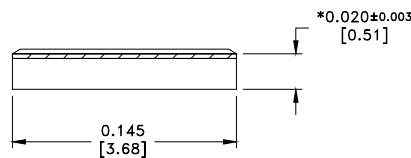
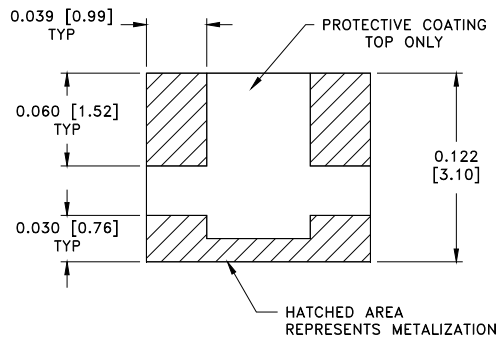
Thick Film, Nickel Barrier, Solder Coated.

Metric Dimensions:

Provided for reference only

Workmanship

PER MIL-STD-1686.



UNITS MARKED ON THIS SURFACE

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