

# ATTENUATOR

## HIGH RELIABILITY CHIP 200 MILLIWATTS



DATA SHEET

PART SERIES: HRMXXXXXXXX

SHEET 1 OF 3  
Dwg 1009785

EN 16-0723  
Revision E

### 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



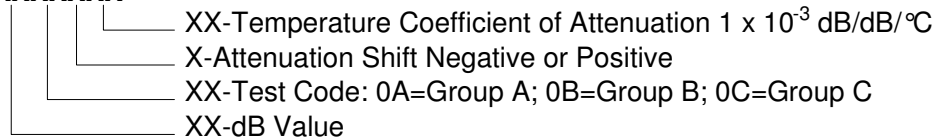
### GENERAL DESCRIPTION

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:

HRMXXXXXXXX



### SPECIFICATIONS

#### 1.0 ELECTRICAL

Nominal Impedance:	50 ohms
Frequency Range:	DC – 18 GHz -0.003 dB/dB/ °C Thru -0.005 dB/dB/ °C DC – 18 GHz -0.006 dB/dB/ °C Thru -0.009 dB/dB/ °C DC – 12.4 GHz
Attenuation Values Available:	0-10 dB in 1 dB increments
Attenuation Accuracy @ 25°C:	± 0.5 dB @ 1GHz
VSWR:	1.30:1 Max @ 1GHz
Input Power	200 Milliwatts 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
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 (X), Direction of Shift (N) and TCA Shift (X).

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### 4.0 QUALITY ASSURANCE

Verify 100% Visual Pre-Cap 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

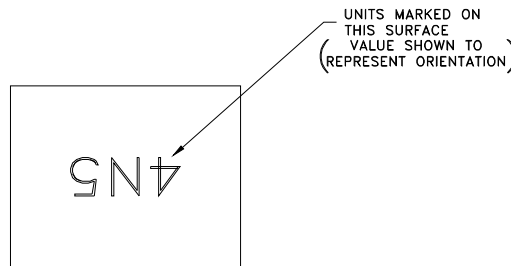
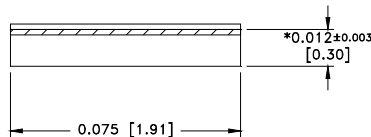
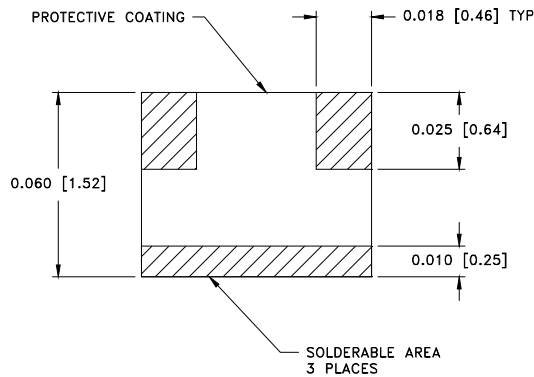
Test samples required for customer see TP-8965.

### 5.0 PACKAGING

Standard Packaging: Serialized Waffle Pack

### 6.0 MECHANICAL

Substrate Material: Alumina 96%  
 Resistive Film: Thick Film  
 Terminal Material: Thick Film, Nickel Barrier, Solder Plated  
 Metric Dimensions: Provided for reference only  
 Workmanship: PER MIL-STD-130



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

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### 7.0 FOOTPRINT

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

