### **ATTENUATOR HIGH RELIABILITY CHIP 200 MILLIWATT**



**DATA SHEET** PART SERIES: HRMXXXXXXXXX3S SHEET 1 OF 3 Dwg 1009845 EN 16-0723

**FEATURES** 

#### **APPLICATIONS**

Mobile Networks Small Footprint 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**

#### **Part Identifier:**

#### HRMXXXXXXXW3S

 AATIOO	
XX-Temperature Coefficient of Attenuation 1 x 10 <sup>-3</sup> dB/dB	3/℃
X-Attenuation Shift Negative or Positive	
XX-Test Code: 0A=Group A; 0B=Group B; 0C=Group C	
XX-dB Value	

#### **SPECIFICATIONS**

#### 1.0 ELECTRICAL

Nominal Impedance: 50 ohms

Frequency Range: 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/ºC

#### 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).

## ATTENUATOR HIGH RELIABILITY CHIP 200 MILLIWATT



DATA SHEET PART SERIES: HRMXXXXXXXXXX3S

SHEET 2 OF 3 Dwg 1009845 EN 16-0723 Revision H

#### 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

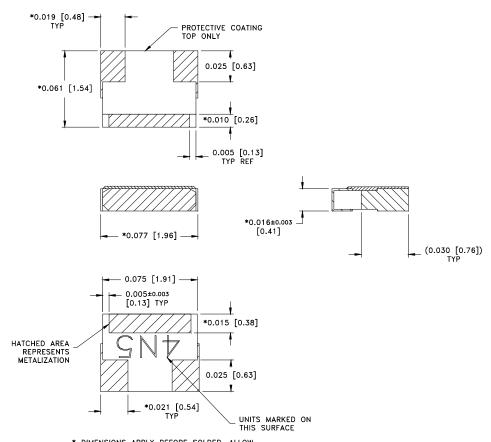
#### 6.0 MECHANICAL

Substrate Material: Alumina 96% Resistive Film: Thick Film

Terminal Material: Thick Film, Nickel Barrier, Solder Coated

Metric Dimensions: Provided for reference only

Workmanship PER MIL-STD-130



\* DIMENSIONS APPLY BEFORE SOLDER, ALLOW 0.015 MAX FOR ALL PRETINNED SURFACES.

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

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**DATA SHEET** 

PART SERIES: HRMXXXXXXXXX3S

SHEET 3 OF 3 Dwg 1009845 EN 16-0723 Revision H

#### 7.0 FOOTPRINT

	Inches						mm					
Part Number	Α	В	С	D	S	W	Α	В	С	D	S	W
HRMXXXXXXXW3S	0.022	0.028	0.041	0.013	0.026	0.075	0.56	0.71	1.04	0.33	0.66	1.91

