

ORDERING INFORMATION

PART IDENTIFIER: HR03XX

(XX)=dB VALUE (see Table 1)

TABLE 1			
ATTENUATION ACCURACY			
dB	DC - 4 GHz	4 - 8 GHz	8 - 12.4 GHz
1 - 3	±0.3	±0.5	±0.5
4 - 6	±0.4	±0.5	±0.5
7 - 10	±0.5	±0.5	±0.75
11 - 15	±0.75	+0.5, -3.0	+0.5, -3.5
16 - 20	±1.0	+0.5, -4.0	+1.0, -6.0

SPECIFICATIONS

1. ELECTRICAL:

Nominal Impedance:	50 Ω
Frequency Range:	DC – 12.4 GHz
Attenuation Values Available:	1-20 dB in 1 dB Increments
Attenuation Accuracy:	See Table 1
VSWR:	DC - 4 GHz – 1.25, 4 – 8 GHz – 1.35, 8 – 12.4 GHz – 1.50
Input Power: 2 Watts CW	Full Rated Power To 125°C, Derated Linearly to 0 Watts at 150°C. Peak Power, 50 Watts for 10 μ S Pulse Width @ 1% Duty Cycle.

2. ENVIRONMENTAL:

Altitude:	Non-Operating: Sea Level to 50,000 Feet. Operating: Sea Level to 50,000 Feet.
Temperature Range:	Non-Operating: -55°C to +150°C Operating: -55°C to +150°C
Vibration:	Per MIL-STD-202, Method 204, Cond. D.
Shock:	Per MIL-STD-202, Method 213, Cond. I.
Moisture Resistance:	Per MIL-STD-202, Method 106 except sub-cycle steps 7A, and 7B and Polarization and Load are not applicable.
Electrostatic Discharge Control:	Per MIL-STD-16867.

3. MARKING:

Unit Marking:	"dB Value" Legibility and Permanency per MIL-STD-130.
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4. QUALITY ASSURANCE:

100% Inspect.

Visual and Mechanical examination for conformance to outline drawing requirements.

Measure and Record VSWR and attenuation at frequency as follows:

1.0 to 10.0 dB - @ 4.0 GHz

11.0 to 20.0 dB - @ 1.0 GHz

ATTENUATOR HIGH RELIABILITY CHIP

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Revision B

Acceptance Limits:

VSWR: See Electrical (section 1 above).

Attenuation: See Electrical (section 1 above).

10 Cycle Thermal Shock @ -55°C to +125°C.

Measure and Record VSWR and Attenuation at frequency as follows:

1.0 to 10.0 dB - @ 4.0 GHz

11.0 to 20.0 dB - @ 1.0 GHz

Acceptance Limits: Same as above.

168 HR Burn-in @ 2.0W @ 25°C.

Measure and Record VSWR and attenuation at frequency as follows:

1.0 to 10.0 dB - @ 4.0 GHz

11.0 to 20.0 dB - @ 1.0 GHz

Acceptance Limits: Same as above.

Test Data Requirements:

Test Data required.

Data retention period: 24 Months.

5. PACKAGING:

Standard Pack per MC0023.

6. MECHANICAL:

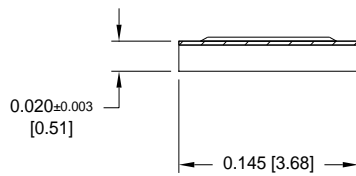
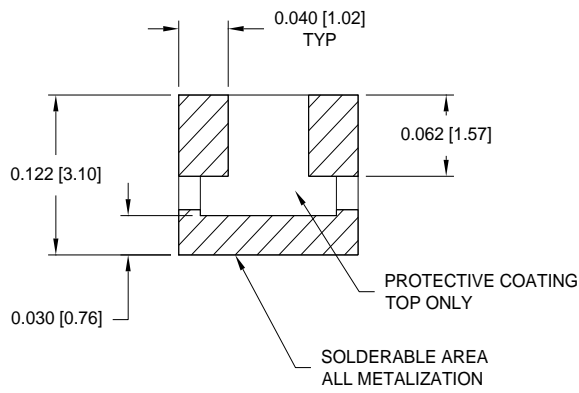
Substrate Material:	Alumina 96%, MIL - I – 10.
Resistive Element Material:	Tantalum Nitride.
Terminal Material:	Platinum Gold, Nickel Barrier, Solder Plate Sn90 Pb10.
Metric Dimensions [mm]:	Provided for reference information only.
Workmanship:	Per MIL-R-55342.

ATTENUATOR HIGH RELIABILITY CHIP

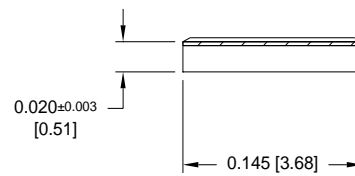
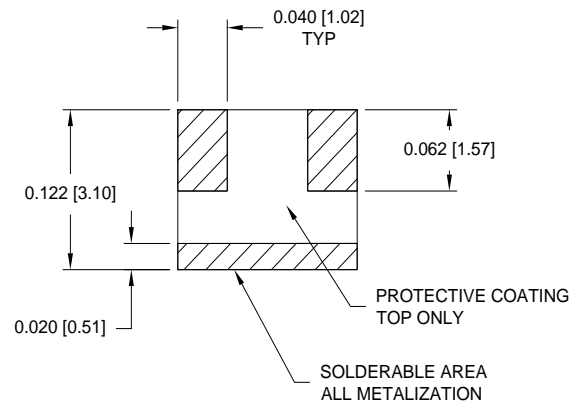
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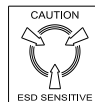
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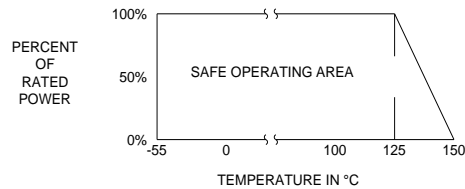
1-10dB



11-20dB



POWER RATING AND DERATING



Unless Otherwise Specified Dimensions are in Inches: Tolerance X.XXX = ±0.005