

# ATTENUATOR HIGH RELIABILITY CHIP 200 MILLIWATTS

DATA SHEET

PART SERIES: HRW0X0XN0XWB2

SHEET 1 OF 2  
Dwg 1011885

EN 19-0256  
Revision H

## 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

Smiths Interconnect 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:

HRW0X0XN0XWB2

X-Temperature Coefficient of Attenuation  $1 \times 10^{-3}$  dB/dB/°C

X-Test Code: A=Group A; B=Group B; C=Group C

X-dB Value

## SPECIFICATIONS

### 1.0 ELECTRICAL

Nominal Impedance:	50 ohms
Frequency Range:	DC – 20 GHz
Attenuation Values Available:	2-6 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, and -0.007dB/dB/°C
Temperature Coefficient Tolerance:	± 0.001 dB/dB/°C

### 2.0 ENVIRONMENTAL

Operating Temperature:	-55°C to +150°C
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### 3.0 MARKING

Unit Marking:	None
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## 4.0 QUALITY ASSURANCE

Verify 100% Visual Pre-Cap Inspection Performed Per TP-9030.

Perform Group A, B and/or C testing as indicated by the part number per TP-9030.

Test Data requirements

Test data required for customer see TP-9030.

Data retention – 24 months

Test samples required for customer see TP-9030.

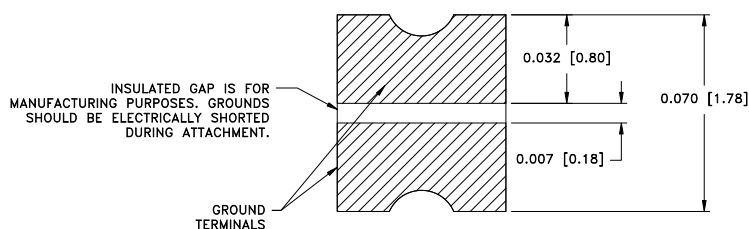
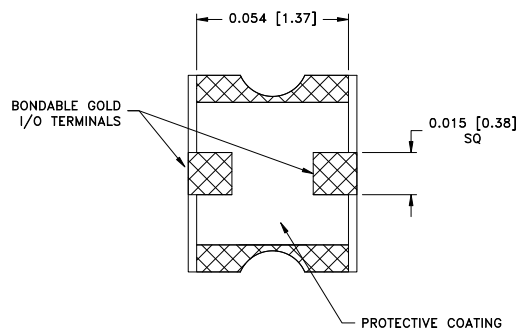
## 5.0 PACKAGING

Standard Packaging:

Serialized Waffle Pack

## 6.0 MECHANICAL

Substrate Material:	Alumina 96%
Resistive Film:	Thick Film
Terminal Material:	Thick Film, Bondable Gold
Ground Plane:	Thick Film, Solderable
Metric Dimensions:	Provided for reference only
Workmanship	PER MIL-STD-130



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