

ORDERING INFORMATION

PART IDENTIFIER: HR93XXXT3

→ (X)=Test Code: A=Group A; B=Group B; C=Group C
→ (XX)=dB VALUE (01 – 20 dB see Table 1)

Engineering Notes:

Single lot and date code available upon request.

Test Times: Group A=2 Weeks

Group B=8 Weeks

Group C=8 Weeks

Standard Lead Time 10 weeks to build product before testing if no stock available.

Assembly DWG: N/A

| 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 |
| Attenuation Stability: | 0.0001 dB/dB/°C |
| VSWR: | DC - 4 GHz – 1.25, 4 – 8 GHz – 1.35, 8 – 12.4 GHz – 1.50. |
| Input Power: 100 Milliwatts CW | Full Rated Power To 125°C, Derated Linearly to 0 Watts at 150°C. Peak Power, 50 Watts for 10μS 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. |

3. MARKING:

Unit Marking: "dB value". Legibility and Permanency per MIL-STD-130.

4. 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 paragraph 5.0 of TP-8965.

Data retention: 24 Months.

Test samples required for customer: See paragraph 5.0 of TP-8965.

5. PACKAGING:

Standard Pack per 755W002 (Serialized Waffle Pack).

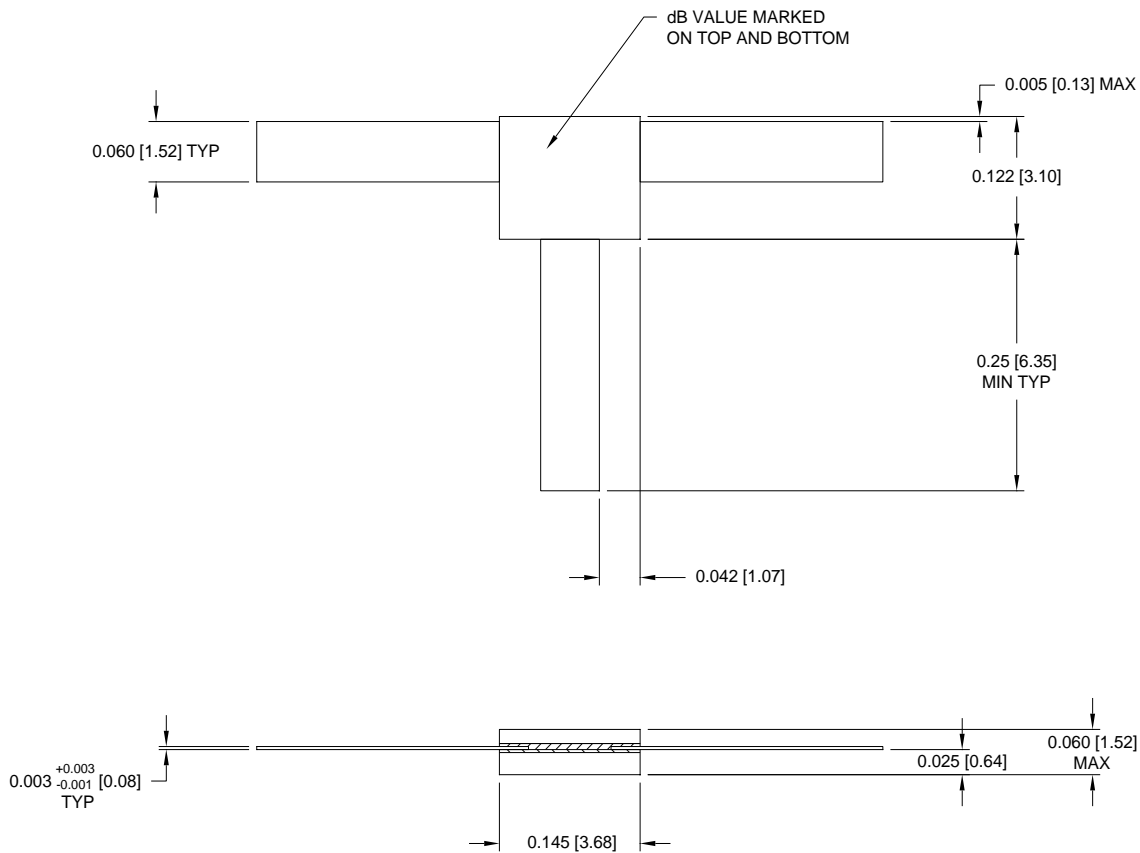
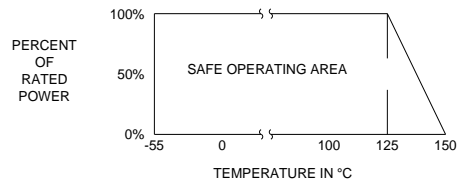
6. MECHANICAL:

| | |
|-----------------------------------|--|
| Substrate and Top Plate Material: | Alumina 96%, MIL - I – 10. |
| Resistive Element Material: | Tantalum Nitride. |
| Terminal Material: | Platinum Gold, Nickel Barrier. |
| Lead Material: | Copper, ASTM B152. |
| Lead Finish: | Gold, MIL-G-45204, Type II, Class 1. |
| Lead Attachment Material: | Solder Sn96.5 Ag3.5. |
| Metric Dimensions [mm]: | Provided for reference information only. |
| Workmanship: | Per MIL-R-55342. |
| Outline Drawing: | See Sheet 3. |

ATTENUATOR HIGH RELIABILITY CHIP

DATASHEET

PART SERIES: HR93XXXT3

Sheet 3 of 3
Doc# HR93XXXT3-1009935ECO-082606
Revision BALLOW ± 0.010 ON TOP PLATE FOR MISALIGNMENT.POWER RATING AND DERATINGUnless Otherwise Specified Dimensions are in Inches: Tolerance X.XXX = ± 0.005 X.XX = ± 0.01