

ATTENUATOR HIGH RELIABILITY CHIP

DATASHEET

PART SERIES: HR95XXXT3

Sheet 1 of 3
Doc# HR95XXXT3-1010025ECO-082606
Revision B

ORDERING INFORMATION

PART IDENTIFIER: HR95XXXT3

→ (X)=Test Code: A=Group A; B=Group B; C=Group C
→ (XX)=dB Value (00 – 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	12.4 - 18 GHz
0	-0, +.3	-0, +.5	-0, +.5	-0, +.5
1 - 3	±0.3	±0.5	±0.5	±0.5
4 - 6	±0.4	±0.5	±0.5	±0.75
7 - 10	±0.5	±0.5	±0.75	±1.0
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 – 18 GHz
Attenuation Values Available:	0-20 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, 12.4 – 18 GHz – 1.50.
Input Power:	Max @ 25°C. Average- 100 MW Watts. Peak-1 Watt 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: Marked only with color dot. 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.

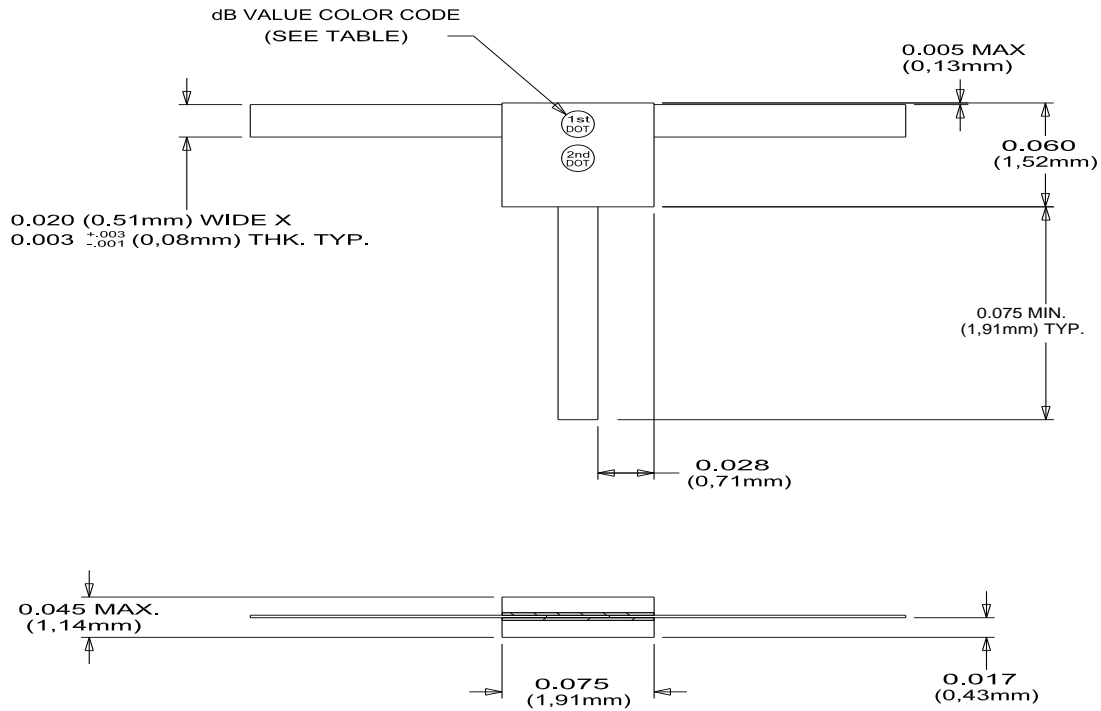
Test samples required for customer: See paragraph 5.0 of TP-8965.

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.
Lead Material:	Copper, ASTM B152.
Lead Finish:	Gold, MIL-G-45204, Type II, Class 1.
Metric Dimensions [mm]:	Provided for reference information only.
Workmanship:	Per MIL-R-55342.
Outline Drawing:	See Sheet 3.



ALLOW +/-0.010 ON TOP PLATE FOR MISALIGNMENT

REFERENCE TABLE					
dB VAL	DOT COLOR		dB VAL	DOT COLOR	
	1st	2nd		1st	2nd
0	BLK	---	11	BRN	BRN
1	BRN	---	12	BRN	RED
2	RED	---	13	BRN	ORG
3	ORG	---	14	BRN	YEL
4	YEL	---	15	BRN	GRN
5	GRN	---	16	BRN	BLU
6	BLU	---	17	BRN	VIO
7	VIO	---	18	BRN	GRY
8	GRY	---	19	BRN	WHT
9	WHT	---	20	RED	BLK
10	BRN	BLK			

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