

Direct-Reading Precision Attenuators

FEATURES:

- ❖ Low VSWR
- ❖ Direct Reading
- ❖ Low Insertion Loss
- ❖ Anti-Backlash Drive
- ❖ Negligible Phase Shift
- ❖ Precision Construction
- ❖ Frequency Independent

APPLICATIONS:

- ❖ Testbench
- ❖ Instrumentation



CDA Series

DESCRIPTION:

Cernex's CDA series direct-reading precision attenuators provide 0 to 60 dB of calibrated attenuation by rotation of a resistive vane mounted in a circular waveguide section. These units are often referred to as "precision rotary vane attenuators."

SPECIFICATIONS:

Waveguide Band	C	X	Ku	K	Ka	Q	U	V	E	W	F	D	G		
Waveguide Size	WR-159	WR-137*	WR-90	WR-75*	WR-62	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10	WR-8	WR-6	WR-5
Frequency Range (GHz)	4.9 to 7.05	5.85 to 8.2	8.2 to 12.4	10 to 15	12.4 to 18.0	18 to 26.5	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110	90 to 140	110 to 170	140 to 220
Insertion Loss (dB) Max.	0.3	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.2	1.5	1.8
VSWR Max	1.15	1.2	1.15	1.2	1.15	1.30	1.15	1.15	1.15	1.20	1.20	1.20	1.25	1.25	1.25
Average Power (Watts)	1.0	5.0	1.0	5.0	1.0	1.0	0.5	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1

The following specifications are common to all bands.

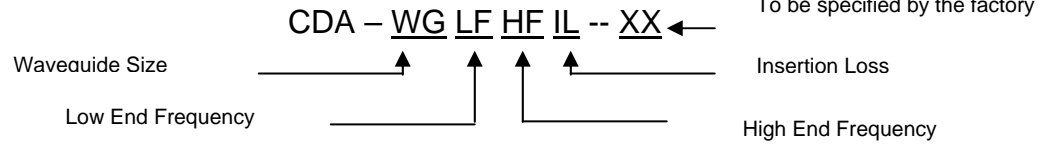
Description	Specification								
Attenuation Range	0 dB to 60 dB (Above Residual Attenuation) over entire waveguide band								
Accuracy (The greater of the two)	0.1 dB or 2% of reading								
Scale Length	21 inches								
Scale Increments	<table border="0"> <tr> <td>0 dB to 0.1dB – 0.01 dB</td> <td>20.0 dB to 30.0 dB – 0.5 dB</td> </tr> <tr> <td>0.1 dB to 1.0 dB – 0.05 dB</td> <td>30.0 dB to 50.0 dB – 1.0 dB</td> </tr> <tr> <td>1.0 dB to 10.0 dB – 0.10 dB</td> <td>Max Setting 60 dB Typical</td> </tr> <tr> <td>10.0 dB to 20.0 dB – 0.20 dB</td> <td></td> </tr> </table>	0 dB to 0.1dB – 0.01 dB	20.0 dB to 30.0 dB – 0.5 dB	0.1 dB to 1.0 dB – 0.05 dB	30.0 dB to 50.0 dB – 1.0 dB	1.0 dB to 10.0 dB – 0.10 dB	Max Setting 60 dB Typical	10.0 dB to 20.0 dB – 0.20 dB	
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Phase Shift vs. Attenuation	Negligible								

*WR-137 and WR-75 Attenuation Range: 0 to 50dB Min



HOW TO ORDER:

Specify Model Number



Example: To order WR-15 Direct reading precision attenuator, specify CDA-5075-XX.

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE