

## Pin Diode Attenuators (Waveguide & Coaxial)

### FEATURES:

- ❖ Covers 1-110GHz
- ❖ Narrow band Attenuators 10 to 60 dB  
– 6% Bandwidth
- ❖ Full band Attenuator 10 to 40 dB

### APPLICATIONS:

- ❖ Wave shaping
- ❖ Amplitude Modulation
- ❖ Signal Switching
- ❖ Receiver Protection



### DESCRIPTION:

### CPD Series

Cernex's CPD series PIN diode attenuator is a SPST reflective attenuator that combines low loss, high isolation performance in a compact package. Attenuation options are available for the CPD series attenuation with isolation versions up to 60 dB. These attenuators are supplied without drivers; control is typically 0 to +10 Vdc. For full band applications, the CPD series attenuation features an excellent on/off ratio and a full bandwidth.

### SPECIFICATIONS:

Waveguide Band	S	CI	C	Cs	XI	XII	X	Xs
Waveguide Size	WR-229	WR-187	WR-159	WR-137	WR-112	WR-102	WR-90	WR-75
Frequency Range (GHz)	3.3 to 4.90	3.95 to 5.85	4.9 to 7.05	5.85 to 8.20	7.05 to 10.0	7.0 to 11.00	8.20 to 12.40	10.0 to 15.00
Attenuation *	-10, -20							
Insertion Loss (db typ.)	0.4	0.5	0.6	0.7	0.7	0.8	0.8	1.0
<b>Operating Specifications</b>								
Control Input	0 to + Vdc							
Operating Temperature	0°C to 60°C							
Storage Temperature	-55°C to +125°C							
VSWR	1.5 Typical (Low Loss Condition)							

\* HIGHER ATTENUATION IS ALSO AVAILABLE

Waveguide Band	Ku	K	Ka	Q	U	V	E	W
Waveguide Size	WR-62	WR-42▲	WR-28▲	WR-22▲	WR-19▲	WR-15▲	WR-12▲	WR-10▲
Frequency Range (GHz)	12.4 to 14.0	18 to 26.5▲	26.5 to 40▲	33 to 50▲	40 to 60▲	50 to 75▲	60 to 90▲	75 to 110▲
Attenuation *	-10, -20							
Insertion Loss (db typ.)	1.0	1.0 *	1.0 *	1.0 *	1.2 *	-	-	-

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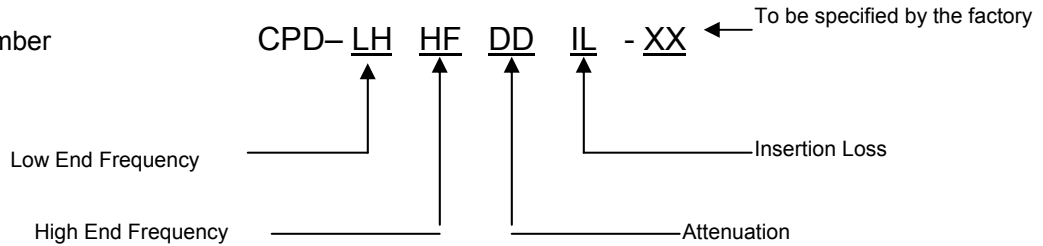
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 ▲ FOR ACTIVE ATTENUATOR ONLY

V, E, W are 50% bandwidth

### HOW TO ORDER:

Specify Model Number



**Example:** To order WR-15 pin diode attenuator with a frequency range of 57 to 62 Ghz and an attenuation of 60db and Insertion Loss of 1.5 dB, specify CPD-57626001-XX.

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE