

LOW LEVEL DETECTORS, DIRECTIONAL

0.5-18 GHz

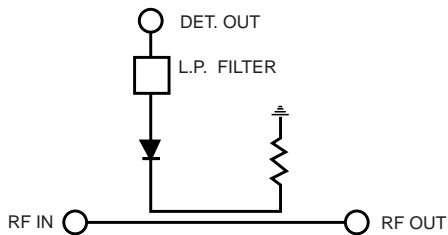
SERIES CD

GENERAL INFORMATION

The Series CD Directional Directors are directional couplers with integral detectors. They are used for monitoring power without disturbing the main line power flow. Series CD are low level devices using high sensitivity detector diodes and high directivity couplers. They are octave band units, but can be custom tuned to any narrow frequency band in order to achieve flatter response.

GENERAL SPECIFICATIONS

Frequency Range:	0.5 to 18.0 GHz
RF Impedance:	50 Ohms
Temperature Information:	Operating temperature from -55°C to +85°C
Connectors:	SMA

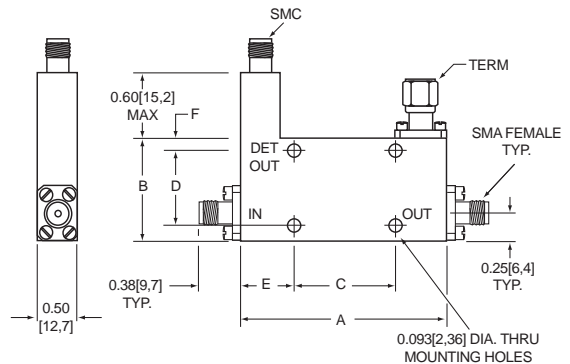


Notes:

1. Standard units are supplied with negative DC output. However, if positive output is desired, place suffix P after the model number, e.g., CD-82-P
2. Insertion loss includes coupled loss (10 dB coupler).
3. Improved flatness specs are available on request.
4. If a narrow frequency bandwidth is required KDI/Triangle can supply a unit that is electrically optimized for that bandwidth. Mechanical dimensions will remain the same as the standard unit, and the price will generally be lower. Specify the frequency range when ordering a narrow bandwidth model and a special part number will be assigned.
5. A 50 ohm termination is supplied on each unit delivered. Power rating is 1.0 watt at +25°C.

MECHANICAL OUTLINES

Model No.	A in[mm]	B in[mm]	C in[mm]	D in[mm]	E in[mm]	F in[mm]
CD-22	3.25[82,55]	1.13[28,70]	1.800[45,7]	0.925[23,50]	0.73[18,54]	0.10[2,5]
CD-25	1.85[46,99]	1.13[28,70]	0.650[16,51]	0.925[23,50]	0.60[15,2]	0.10[2,5]
CD-32	1.20[30,48]	1.13[28,70]	—	0.925[23,50]	0.60[15,2]	0.10[2,5]
CD-62	1.00[25,4]	1.25[31,75]	0.475[12,06]	—	0.42[10,67]	0.68[17,27]
CD-82	1.00[25,4]	1.25[31,75]	0.475[12,06]	—	0.40[10,2]	0.68[17,27]
CD-84	1.00[25,4]	1.00[25,4]	—	0.800[20,3]	0.50[12,7]	0.10[2,5]
CD-92	1.00[25,4]	1.00[25,4]	—	0.800[20,3]	0.50[12,7]	0.10[2,5]



ELECTRICAL PERFORMANCE

Model No.	Frequency (4) Range, GHz	Minimum Directivity, dB	Maximum Insertion Loss, dB (2)	Maximum VSWR	Flatness Over (3) Freq. Range, dB	Detector Output at 10mW Input* mV	Output Polarity Note 1
CD-22	0.5-1.0	25	0.7	1.20	±.75	125	neg.
CD-25	1.0-2.0	20	0.8	1.20	±.75	125	neg.
CD-32	2.0-4.0	20	0.8	1.25	±.75	125	neg.
CD-62	4.0-8.0	18	0.8	1.25	±.75	100	neg.
CD-82	7.0-12.4	17	0.9	1.30	±.75	75	neg.
CD-84	8.0-16.0	15	1.0	1.45	±1.0	50	neg.
CD-92	12.0-18.0	14	1.0	1.50	±1.0	50	neg.

*Across a 1,000 OHM load

KEY: Inches[Millimeters] .XX ±.03 .XXX ±.010 [.X ±0.8 .XX ±0.25]