

5-1000MHz Digital Broadband Directional Coupler Specifications DCT* Series

- Tin-plated zinc die-cast housing with tongue and groove soldered back plate providing effective -130dB RFI shielding.
- High precision machined SCTE compliant threaded ports spaced on one-inch centers.
- All F ports weather sealed to withstand up to 15-PSI internal pressure.
- Patent pending gold plated 360-degree center conductor seizing pin.
- Glass PCB with micro strip design and SMD component technology.
- Input F port passes 6kv combination wave surge tolerance. Output F ports pass 6KV 500A 100khz duty cycle ring wave surge test (IEEE62.41 Cat A3 standard)
- Built-in capacitors on all ports block DC and low frequency AC effectively removing sheath current flowing through ferrite cores reducing hum modulation.
- Proprietary magnetism resistant ferrite core prevents saturation and maintains a low inter-modulation distortion.
- -35dB port-to-port isolation from 15-50MHz for high-level upstream signals.
- High quality device plating passes 1200 hours of salt spray testing.
- Maintains temperature stability from -40C to 85C in port-to-port isolation, return loss and flatness.
- Grounding lug conforms to National Electrical Safety Code. Includes Stainless steel mounting screw.



DCT-4



DCT-6



DCT-9

	DCT-6	DCT-9	DCT-12	DCT-16	DCT-20
Insertion Loss -Thru/Tap	6dB	9dB	12dB	16dB	20dB
5 – 14Mhz	2.3/6.5dB	1.2/9.5dB	.90/12.4dB	.90/16.1dB	.90/20.2dB
15 – 49Mhz	2.2/6.4dB	1.1/9.4dB	.90/12.3dB	.90/16.1dB	.90/20.3dB
50 – 400Mhz	2.3/6.3dB	1.3/9.3dB	.93/12.3dB	.93/16.2dB	.90/20.4dB
401- 750Mhz	2.5/6.2dB	1.5/9.2dB	.95/12.2dB	.95/16.1dB	.91/20.8dB
751 – 1000Mhz	2.7/6.2dB	1.7/9.1dB	.97/12.1dB	.97/16.0dB	.93/21.0dB
Return Loss Input					
5 – 14Mhz	26.0dB	25.1dB	25.0dB	25.0dB	25.0dB
15 – 49Mhz	26.1dB	25.1dB	25.0dB	25.0dB	25.0dB
50 – 400Mhz	25.0dB	23.0dB	23.0dB	23.0dB	23.0dB
401- 750Mhz	25.5dB	24.5dB	24.0dB	24.0dB	24.0dB
751 – 1000Mhz	25.8dB	24.8dB	24.4dB	24.4dB	24.4dB
Return Loss Output /Tap					
5 – 14Mhz	23.0/31.0dB	29.0/30.0dB	29.0/30.0dB	29.0/30.0dB	29.0/30.0dB
15 – 49Mhz	30.0/32.0dB	29.0/31.0dB	29.0/31.0dB	29.0/31.0dB	29.0/31.0dB
50 – 400Mhz	25.0/27.0dB	24.0/26.0dB	24.0/26.0dB	24.0/26.0dB	24.0/26.0dB
401- 750Mhz	29.0/32.0dB	28.0/31.0dB	28.0/31.0dB	28.0/31.0dB	28.0/31.0dB
751 – 1000Mhz	29.0/29.0dB	29.0/28.0dB	29.0/28.0dB	29.0/28.0dB	29.0/28.0dB
Tap to Port Isolation					
5 – 14Mhz	36.0dB	36.0dB	36.0dB	36.0dB	36.0dB
15 – 49Mhz	35.0dB	35.0dB	35.0dB	35.0dB	35.0dB
50 – 400Mhz	32.0dB	31.0dB	31.0dB	31.0dB	31.0dB
401- 750Mhz	32.0dB	30.0dB	30.0dB	30.0dB	30.0dB
751 – 1000Mhz	30.0dB	31.0dB	31.0dB	31.0dB	31.0dB

*Specifications subject to change without notice