Features and Benefits

MGDCH-2116FEC-G2

Milenium 1.2 GHz Directional Coupler

Antronix's 1.2 GHz 16 dB directional couplers come equipped with a plug-in EQ option for flexibility to handle any system requirements and can handle high current continuously on all ports. As with all Antronix mainline passives, this directional coupler has a four-stage corrosion protection process to withstand harsh environments.

To ensure our main line passives exceed industry performance standards, Antronix has developed a proprietary ferrite core material and circuit design. This design, when combined with the surge withstands capability and environmentally robust housing provides the user with unmatched performance and reliability.

- **1.2 GHz Bandwidth**
- **Rotational Seizure Posts**
  Enable the user to easily accommodate all mounting configurations
- **6 kV Combination Surge Withstand on all Ports**
  Antronix line passives have the capacity to withstand a 6 kV combination wave surge (per IEEE C62.41 Cat. B3) on each port
- **Integrated Strip Gauge**
  Allows for quick and accurate connector pin length
- **Four-Stage Corrosion Protection**
  - A 360 aluminum alloy housing (the most corrosive-resistant alloy material on the market)
  - The housing is then impregnated with a sealer to eliminate porosity
  - Clear chromate coatings are then applied inside and out to protect the aluminum and prevent corrosion
  - Two polyurethane coatings are applied for superior protection
- **Fuse Holder for Each Leg**
  Provides the ability to direct and conserve power through on each output leg
- **Interlocking Tongue-and-Groove Housing and Faceplate**
  Also includes a wire mesh gasket to guarantee excellent RF Isolation
- **E-Option Signal Conditioning Standard**

CEG - Cable Equalizer	RAG - Return Path Attenuator
HTG - High Tap Value Filter	CSG - Cable Simulator

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Electrical Specifications
Milenium 1.2 GHz Directional Coupler

Model #		MGDCH-2116FEC-G2 16dB Coupler	
	Freq. (MHz)	Max	Avg
Tap Loss (dB)	5-750	16.0 ± 1.0	
	750-1000	16.0 ± 1.2	
	1000-1218	16.6 ± 1.5	
Insertion Loss Max/Avg (dB)	5	1.2	0.9
	30	1.2	0.8
	50	1.2	0.8
	100	1.3	0.8
	450	1.5	1.0
	550	1.5	1.1
	750	1.7	1.3
	870	2.0	1.5
	1000	2.2	1.7
	1218	2.9	2.3
Isolation Min (dB)	5-30	20	
	30-400	24	
	400-600	23	
	600-750	20	
	750-900	20	
	900-1218	20	
Return Loss* Min (dB)	5-25	16	
	25-200	16	
	200-900	16	
	900-1000	16	
	1000-1218	16	
Hum Mod @ 15 Amps Min (dB)	5-10	55	
	10-1000	60	
	1000-1218	55	

*Tap Port Return Loss degraded by 1 dB when using a plug-in conditioner.

General	
Nominal Impedance	75 Ω
Surge Withstand	6 kV Combination Wave Surge per IEEE C62.41 Category B3
Power Rating	15 Amps Continuous, 60 to 90 VAC
Screening Effectiveness	105 dB (min)
Environmental	
Pressure Seal	15 psi
Operating Temperature	-40 °C to 60 °C
Corrosion Resistance	Meets ANSI/SCTE Specification

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