Features and Benefits

ANTRONIX®

MGPIH-G2/MGLSH-G2/MGDCH-G2
Power Inserter/Line Splitter/Directional Coupler
Milenium 1.2 GHz Line Passives

Antronix offers a complete main line passive product family to meet every design requirement. We offer 1.2 GHz power inserters, line splitters and directional couplers that can handle 15 amperes continuously on all ports. As an additional reliability measure, all units can withstand 25 amperes for two hours. The main line passives can also withstand multiple 6 kV surges (per IEEE C62.41-1991 Cat. B3). Antronix main line passives have 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
- **High Current Capacity for Extreme Situations**
  The capacity to withstand 25 amperes for two hours, if main line is short-circuited under extreme fault conditions.
- **Available High-Current Electronic Crowbar Device**
  Engages when voltage exceeds 180 V
- **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

440 Forsgate Drive, Cranbury, NJ 08512 • T: 609.860.0160 • F: 609.860.1687 • antronix.com

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Electrical Specifications
Milenium 1.2 GHz Line Passives

Model #		MGPIH-2000F-G2 Power Inserter		MGLSH-2F-G2 2 Way Splitter		MGLSH-3F-G2 3 Way Splitter		MGLSH-3BF-G2 3 Way Bal Splitter		MGDCH-2108F-G2 8dB Coupler		MGDCH-2112F-G2 12dB Coupler		MGDCH-2116F-G2 16dB Coupler	
	Freq. (MHz)	**Max**	**Avg**	**Max**	**Avg**	**Max**	**Avg**	**Max**	**Avg**	**Max**	**Avg**	**Max**	**Avg**	**Max**	**Avg**
Tap Loss (dB)	5-750									8.3 ± 1.0		12.3 ± 1.0		16.0 ± 1.0	
	751-1000									8.3 ± 1.2		12.3 ± 1.2		16.0 ± 1.2	
	1001-1218									8.3 ± 1.5		12.3 ± 1.5		16.0 ± 1.5	
Insertion Loss Max/Avg (dB)	5	0.6	0.3	4.2	4.0	4.4/7.5	4.1/7.0	6.8	6.1	2.1	2.0	1.4	1.4	1.1	0.9
	30	0.6	0.2	3.9	3.5	4.0/7.3	3.6/7.0	7.1	6.1	1.8	1.6	1.1	1.0	0.9	0.6
	50	0.6	0.2	4.1	3.5	4.1/7.3	3.6/7.0	7.1	6.1	1.8	1.6	1.2	1.1	1.0	0.6
	100	0.7	0.3	4.1	3.6	4.1/7.5	3.7/7.1	7.1	6.2	1.9	1.7	1.3	1.2	1.0	0.7
	450	0.8	0.4	4.3	3.9	4.3/7.7	4.1/7.4	7.3	6.4	2.2	1.9	1.5	1.4	1.2	1.0
	550	0.8	0.5	4.4	4.0	4.6/7.9	4.2/7.5	7.3	6.5	2.4	2.0	1.6	1.5	1.3	1.1
	750	1.1	0.5	4.8	4.2	5.2/8.5	4.4/7.9	7.8	7.3	2.7	2.2	2.1	1.6	1.7	1.2
	870	1.3	0.7	5.2	4.5	5.5/8.9	4.6/8.3	7.8	7.4	3.1	2.5	2.4	1.9	2.0	1.5
	1000	1.5	0.9	5.5	4.9	5.8/9.2	5.2/8.8	7.8	7.6	3.5	3.0	2.7	2.4	2.3	2.0
	1218	1.8	1.4	6.0	5.4	6.0/9.5	5.5/9.1	8.6	8.5	4.0	3.5	3.2	2.9	2.6	2.3
Isolation Min (dB)	5-30	60		20		20		18		18		20		20	
	30-400	60		26		24		20		21		24		26	
	400-600	60		26		24		20		21		23		25	
	600-750	60		24		22		20		20		22		23	
	750-900	57		20		20		20		20		20		20	
	900-1218	57		20		20		18		20		20		20	
Return Loss Min (dB)	5-25	15		15		15		15		15		15		15	
	25-200	17		17		17		17		16		17		17	
	200-900	17		17		17		17		17		17		17	
	900-1000	16		16		16		16		16		16		16	
	1000-1218	15		16		16		16		16		16		16	
Hum Mod @ 15 Amps Min (dB)	5-10	55		55		55		55		55		55		55	
	10-1000	60		60		60		60		60		60		60	
	1000-1218	55		55		55		55		55		55		55	

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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