Features and Benefits

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

Antronix offers a complete main line passive product family to meet every design requirement. We offer 1.2 GHz line splitters, directional couplers and power inserters that can handle high current continuously on all ports. 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 Wave Surge Withstand on all Ports**
  Antronix line passives have the capacity to withstand 6 kV combination wave surges (per IEEE C62.41 Cat. B3) on all ports.
- **Integrated Strip Gauge**
  Allows for quick and accurate connector pin length.
- **Four-Stage Corrosion Protection**
  - A 360-aluminum alloy housing.
  - The housing is then impregnated with a sealer to eliminate porosity.
  - Clear chromate coatings are applied inside and out to protect against corrosion.
  - Two polyurethane coatings are applied for superior protection.
- **High Current Capacity for Extreme Situations**
- **Fuse Holder for each Output**
  Enable the user to easily accommodate all mounting configurations.
- **Optional with High-Current Electronic Crowbar Device**
  Superior surge protection with an electronic crowbar to clamp surge voltages above 180 volts.

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Electrical Specifications
1.2 GHz Milenium 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	
Specification	**Freq (MHz)**	**Max**	**Avg**	**Max**	**Avg**	**Max**	**Avg**	**Max**	**Avg**	**Max**	**Avg**	**Max**	**Avg**	**Max**	**Avg**
Insertion Loss Max/Avg (dB)	5	0.8	0.3	4.3	4.0	4.7 / 8.2	4.0 / 7.4	6.4	6.1	2.3	2.0	1.6	1.3	1.3	0.9
	30	1.0	0.3	4.3	3.5	4.7 / 8.2	4.0 / 7.3	7.1	6.3	2.4	1.8	1.9	1.2	1.5	0.8
	50	1.0	0.3	4.3	3.5	4.7 / 8.2	4.0 / 7.3	7.1	6.3	2.4	1.8	1.9	1.3	1.5	0.8
	100	1.0	0.5	4.3	3.6	4.7 / 8.2	4.0 / 7.4	7.1	6.3	2.4	1.9	1.9	1.2	1.5	0.8
	450	1.1	0.6	4.5	3.9	4.7 / 8.2	4.4 / 7.7	7.1	6.4	2.6	1.9	2.0	1.4	1.6	1.0
	550	1.1	0.7	4.5	4.0	5.2 / 8.5	4.5 / 7.7	7.3	6.5	2.6	2.0	2.2	1.5	1.6	1.1
	750	1.2	0.7	4.8	4.2	5.6 / 8.5	4.5 / 7.7	7.8	7.3	2.9	2.2	2.2	1.6	1.9	1.2
	870	1.3	0.7	5.2	4.5	5.6 / 8.5	4.8 / 7.8	7.8	7.4	3.3	2.6	2.4	1.9	2.2	1.5
	1000	1.5	0.9	5.5	4.9	6.0 / 9.0	4.9 / 7.8	7.8	7.6	3.5	3.0	2.7	2.4	2.2	1.9
	1218	1.8	1.4	6.1	5.4	6.5 / 9.5	5.8 / 8.3	8.9	8.5	4.0	3.5	3.4	2.9	2.6	2.3
Tap Loss (dB)	5-750	-		-		-		-		8.3 ± 1.0		12.3 ± 1.0		16.0 ± 1.0	
	750-1000	-		-		-		-		8.3 ± 1.2		12.4 ± 1.2		16.4 ± 1.2	
	1000-1218	-		-		-		-		8.5 ± 1.5		12.7 ± 1.5		16.6 ± 1.5	
Specification	**Freq (MHz)**	**Min**		**Min**		**Min**		**Min**		**Min**		**Min**		**Min**	
Isolation Min (dB)	5-30	60		20		19		18		17		20		20	
	30-400	60		24		20		20		21		22		24	
	400-600	60		23		20		20		21		22		23	
	600-900	60		20		20		20		20		20		20	
	900-1218	57		20		20		18		20		20		20	
Return Loss Min (dB)	5-50	15		15		15		15		15		15		15	
	50-108	16		16		16		16		16		16		16	
	108-204	20		16		16		16		16		16		16	
	204-450	20		16		15		16		16		16		16	
	450-684	20		16		16		16		16		16		16	
	684-1218	16		16		16		16		16		16		16	

General	
Nominal Impedance	75Ω
Power Rating	15 Amps Continuous, 60 to 90 VAC 18 Amps Continuous, 60 to 90 VAC, Power Inserter RF Ports 20 Amps Continuous, 60 to 90 VAC, Power Inserter AC Port
Screening Effectiveness	105 dB (min)
Environmental	
Operating Temperature	-40°C to +60°C
Pressure Seal (psi)	15 psi
Surge Withstand	6 kV Combination Wave Surge per IEEE C62.41 Category B3 on all ports
Corrosion Resistance	ANSI/SCTE-143 salt spray for 1000 hours