

Coaxial Low Pass Filter

50Ω DC to 720 MHz

Maximum Ratings

Operating Temperature -55°C to +100°C

Storage Temperature -55°C to +100°C

RF Power Input 0.5 W max.

Permanent damage may occur if any of these limits are exceeded.

Features

- Good Attenuation Rate, 1.35 Typ. 20 dB / 3 dB BW Ratio
- Rugged Shielded Case
- Other SLP Models Available with Wide Selection of Cut-Off Frequencies

Applications

- Lab Use
- Test Equipment
- Video Equipment

SLP-800+



Generic photo used for illustration purposes only

CASE STYLE: FF99

Connectors	Model
SMA	SLP-800+

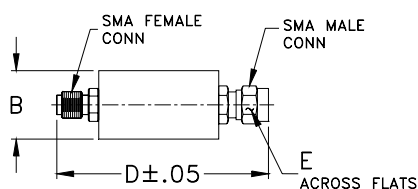
+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

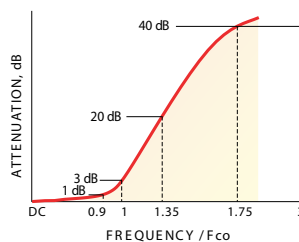
Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-720	800	1080-1400	1400-2000	1.7	18

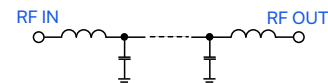
Outline Drawing



typical frequency response



electrical schematic

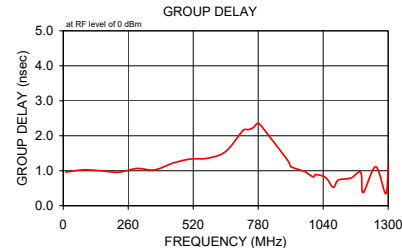
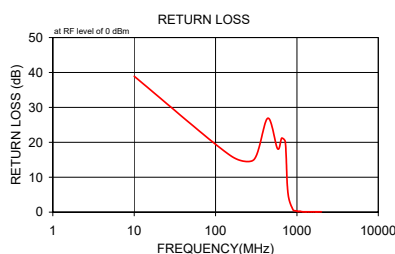
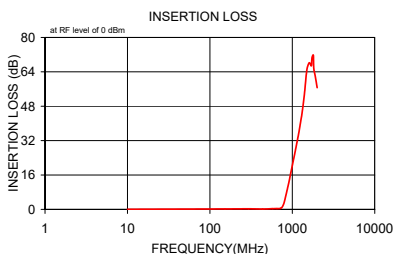


Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	σ			
10.00	0.04	0.1	38.9	10.0	0.96
152.50	0.20	0.1	16.2	80.0	1.03
295.00	0.26	0.1	15.0	152.5	1.00
437.50	0.18	0.1	26.9	222.5	0.96
577.50	0.32	0.1	18.2	295.0	1.07
650.00	0.35	0.1	21.2	365.0	1.03
720.00	0.48	0.1	20.1	437.5	1.22
760.00	1.36	0.2	8.0	507.5	1.33
800.00	3.45	0.3	3.7	577.5	1.36
900.00	11.91	0.5	0.6	650.0	1.55
950.00	16.24	0.5	0.4	720.0	2.16
1000.00	20.40	0.6	0.3	740.0	2.17
1010.00	21.22	0.6	0.2	760.0	2.23
1050.00	24.40	0.7	0.2	780.0	2.36
1080.00	26.70	0.7	0.2	800.0	2.21
1100.00	28.21	0.7	0.2	900.0	1.27
1190.00	34.98	1.0	0.1	910.0	1.12
1250.00	39.81	1.3	0.1	950.0	1.02
1290.00	43.03	1.5	0.1	970.0	0.96
1300.00	43.66	1.4	0.1	1000.0	0.83
1400.00	53.30	3.1	0.1	1010.0	0.89
1500.00	64.81	3.4	0.1	1050.0	0.80
1600.00	68.20	6.6	0.1	1080.0	0.53
1700.00	66.77	2.9	0.1	1100.0	0.73
1720.00	68.97	6.7	0.1	1150.0	0.79
1735.00	70.75	8.2	0.1	1190.0	0.96
1800.00	71.72	6.9	0.1	1200.0	0.38
1820.00	65.74	5.8	0.1	1250.0	1.12
1900.00	61.76	6.1	0.1	1290.0	0.35
2000.00	56.62	3.2	0.1	1300.0	1.12

Outline Dimensions (inch/mm)

B	D	E	WT GRAMS
.70	1.98	.312	42.0
(17.78)	(50.29)	(7.92)	



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



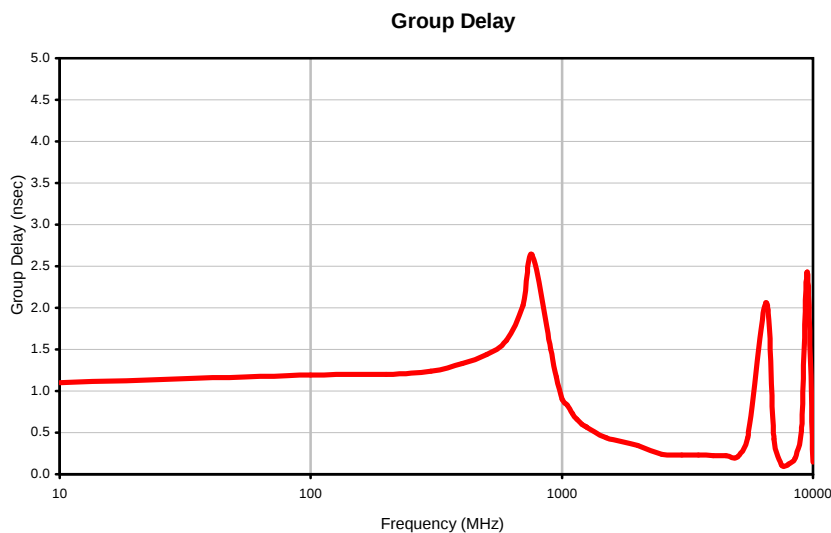
www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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ECO-024582
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250219

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
10.0	0.21	34.78	10.0	1.100
100.0	0.13	30.31	100.0	1.190
200.0	0.18	24.10	200.0	1.200
300.0	0.23	21.74	300.0	1.240
400.0	0.26	23.81	400.0	1.330
500.0	0.29	33.18	500.0	1.440
600.0	0.42	19.11	600.0	1.610
700.0	0.49	26.59	700.0	2.030
760.0	0.98	11.83	760.0	2.640
900.0	12.12	0.74	900.0	1.510
950.0	17.08	0.45	950.0	1.170
1000.0	21.70	0.36	1000.0	0.900
1050.0	25.91	0.29	1050.0	0.830
1100.0	29.86	0.29	1100.0	0.730
1150.0	33.55	0.27	1150.0	0.660
1200.0	37.05	0.25	1200.0	0.600
1250.0	40.40	0.27	1240.0	0.580
1260.0	41.02	0.26	1250.0	0.570
1500.0	54.46	0.26	1260.0	0.560
2000.0	68.05	0.33	1500.0	0.440
2500.0	66.83	0.35	2000.0	0.350
3000.0	64.08	0.38	2500.0	0.240
3500.0	61.96	0.38	3000.0	0.230
4000.0	59.69	0.37	3500.0	0.230
4500.0	56.77	0.34	4000.0	0.220
5000.0	51.53	0.35	4500.0	0.220
5500.0	37.97	0.38	5000.0	0.210
6000.0	43.27	0.59	5500.0	0.440
6500.0	57.35	0.45	6500.0	2.060
7000.0	43.99	0.49	7000.0	0.420
7500.0	53.19	0.37	7500.0	0.110
8000.0	53.03	0.34	8000.0	0.120
8500.0	44.64	0.34	8500.0	0.190
9000.0	33.94	0.41	9000.0	0.520
9500.0	18.73	1.20	9500.0	2.430
10000.0	34.97	0.45	10000.0	0.150

Typical Performance Curves



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED RoHS compliant
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SLP-800+
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FF56
FF99

Outline Dimensions



CASE #.	A	B	C	D	E	WT GRAMS
FF56	--	.46 (11.68)	--	1.70 (43.18)	.312 (7.92)	18.0
FF99	--	.70 (17.78)	--	1.98 (50.29)		42.0

Dimensions are in inches (mm). Tolerances: 2Pl. ± .03; 3Pl. ± .015

Notes:

1. Case material: Brass.
2. Case finish: Nickel plate.



All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I