

Coaxial Low Pass Filter

50Ω DC to 900 MHz

Maximum Ratings

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C

RF Power Input 0.5W max.

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

Features

- good attenuation rate, 1.35 typ. 20dB/ 3dB BW ratio
- rugged shielded case
- other SLP models available with wide selection of cut-off frequencies

Applications

- lab use
- test equipment
- video equipment

SLP-1000+



Generic photo used for illustration purposes only

CASE STYLE: FF99

Connectors Model
SMA SLP-1000+

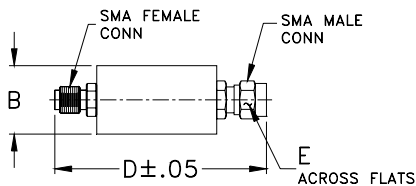
+RoHS Compliant

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

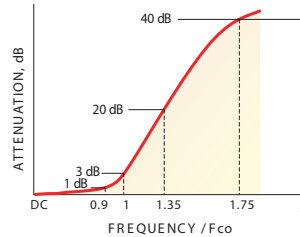
Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
(loss < 1 dB)	(loss 3 dB)				
DC-900	990	1340-1750	1750-2000	1.7	18

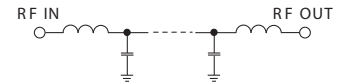
Outline Drawing



typical frequency response



electrical schematic

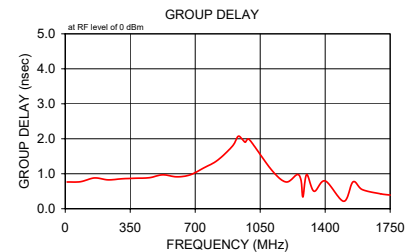
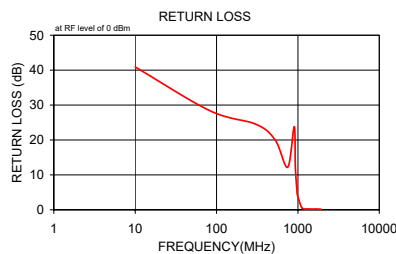
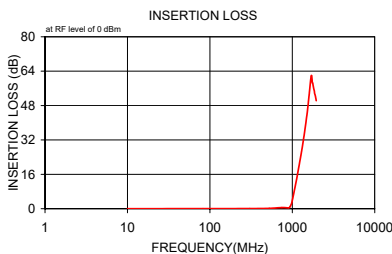


Outline Dimensions (inch/mm)

B	D	E	wt
.67	1.98	.312	grams
17.02	50.29	7.92	42.0

Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	σ			
10.00	0.01	0.0	40.9	10.00	0.77
82.50	0.02	0.0	28.4	82.50	0.77
305.00	0.07	0.1	24.5	157.50	0.88
525.00	0.17	0.1	20.0	230.00	0.83
747.50	0.54	0.1	12.2	305.00	0.86
900.00	0.40	0.1	23.8	377.50	0.87
930.00	0.75	0.1	12.4	452.50	0.89
970.00	2.06	0.2	5.9	525.00	0.97
990.00	3.10	0.2	4.1	600.00	0.91
1115.00	12.75	0.5	0.6	672.50	0.97
1250.00	23.28	0.7	0.2	747.50	1.17
1270.00	24.76	0.8	0.2	820.00	1.39
1280.00	25.53	0.8	0.2	900.00	1.79
1300.00	27.07	0.9	0.2	930.00	2.07
1340.00	30.19	1.0	0.2	950.00	2.01
1400.00	34.90	1.2	0.2	970.00	1.90
1500.00	43.32	1.8	0.2	990.00	1.99
1550.00	48.04	2.6	0.1	1115.00	1.08
1600.00	53.09	3.9	0.2	1190.00	0.76
1700.00	61.90	8.3	0.2	1250.00	0.98
1750.00	58.54	3.6	0.1	1270.00	0.81
1760.06	58.62	6.4	0.1	1280.00	0.34
1790.00	57.18	2.8	0.1	1300.00	0.98
1800.00	56.81	1.9	0.1	1340.00	0.50
1820.00	55.81	3.2	0.1	1400.00	0.80
1850.00	54.77	2.3	0.1	1500.00	0.21
1860.00	53.85	1.3	0.1	1550.00	0.77
1880.00	53.19	1.8	0.1	1600.00	0.55
1900.05	52.56	1.6	0.1	1700.00	0.43
1950.00	50.28	1.1	0.1	1750.00	0.39



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/MCStore/terms.jsp



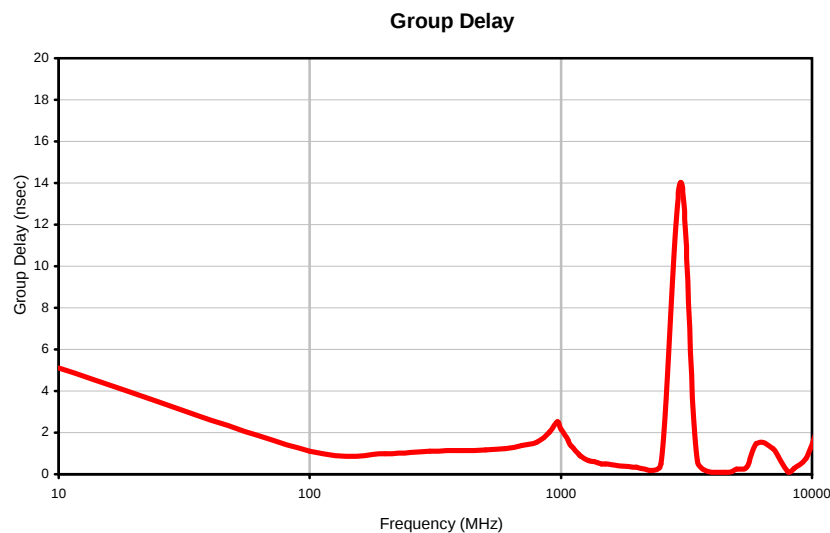
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SLP-1000+
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Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
10.0	0.92	23.38	10.0	5.110
100.0	0.16	28.91	100.0	1.120
200.0	0.23	26.51	200.0	1.000
300.0	0.26	29.36	300.0	1.110
400.0	0.30	71.14	400.0	1.130
500.0	0.30	29.89	500.0	1.170
600.0	0.38	28.68	600.0	1.240
700.0	0.42	25.94	700.0	1.380
800.0	0.53	19.73	800.0	1.530
900.0	0.70	19.74	900.0	2.040
1000.0	3.96	3.73	970.0	2.510
1100.0	12.94	0.82	1000.0	2.160
1200.0	21.70	0.43	1070.0	1.630
1300.0	29.24	0.35	1100.0	1.360
1400.0	35.71	0.30	1180.0	0.940
1450.0	38.92	0.31	1200.0	0.860
1500.0	41.71	0.28	1300.0	0.660
2000.0	61.41	0.27	1350.0	0.630
2500.0	74.54	0.30	1400.0	0.550
3000.0	79.25	0.42	1450.0	0.500
3500.0	81.02	0.54	1500.0	0.490
4000.0	71.15	0.47	2000.0	0.340
4500.0	63.10	0.45	2500.0	0.500
5000.0	57.16	0.47	3000.0	14.020
5500.0	55.67	0.50	3500.0	0.630
6000.0	29.82	1.03	4500.0	0.090
6500.0	46.63	0.52	5000.0	0.250
7000.0	38.52	0.50	5500.0	0.350
7500.0	55.46	0.29	6000.0	1.490
8000.0	52.16	0.22	7000.0	1.220
8500.0	41.33	0.21	8000.0	0.110
9000.0	34.68	0.27	8500.0	0.280
9500.0	32.28	0.15	9500.0	0.770
10000.0	52.36	0.12	10500.0	2.160

Typical Performance Curves



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED RoHS compliant
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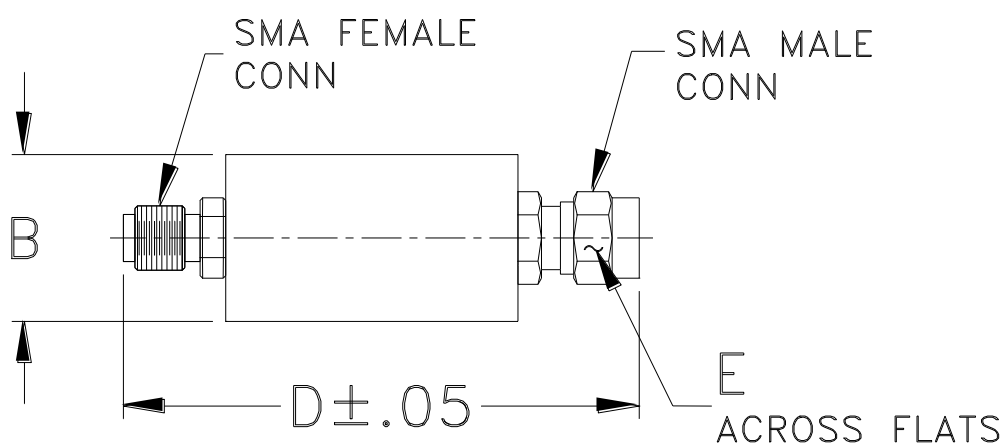
The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



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SLP-1000+
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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