Coaxial

Low Pass Filter

SLP-150+

50Ω DC to 140 MHz



Generic photo used for illustration purposes only

CASE STYLE: FF99

Connectors	Model
SMA	SLP-150+

+RoHS Compliant

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

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 of cut-off frequencies

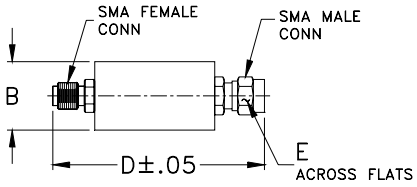
Applications

- lab use
- test equipment
- video equipment

Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
				Passband Typ.	Stopband Typ.
(loss < 1 dB)	(loss 3 dB)	(loss > 20 dB)	(loss > 40 dB)		
DC-140	155	210-300	300-600	1.7	18

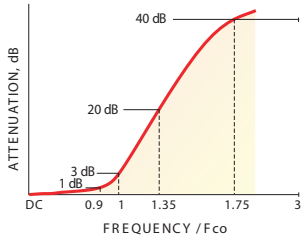
Outline Drawing



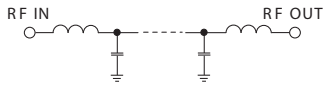
Outline Dimensions (inch / mm)

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

typical frequency response

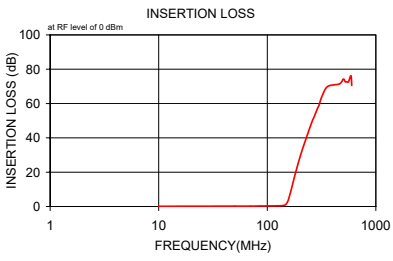


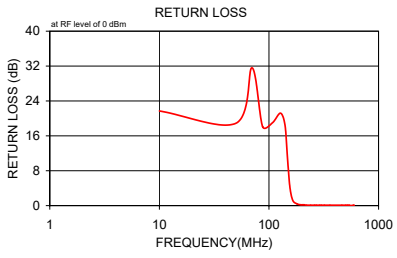
electrical schematic

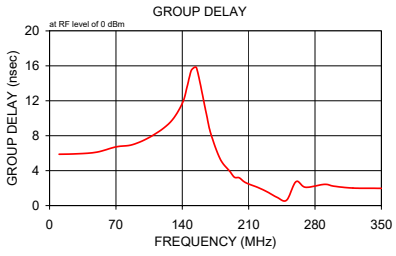


Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) x̄	Insertion Loss (dB) σ	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
10.00	0.12	0.1	21.7	10.00	5.875
50.00	0.20	0.0	18.9	30.00	5.932
70.00	0.19	0.1	31.6	50.00	6.124
87.50	0.30	0.1	18.1	70.00	6.723
107.50	0.34	0.1	19.0	87.50	6.973
127.50	0.43	0.1	21.2	107.50	7.940
140.00	0.59	0.1	18.5	127.50	9.564
147.50	1.11	0.1	11.0	140.00	11.710
155.00	3.27	0.2	4.3	145.00	13.582
165.00	9.15	0.4	1.2	147.50	14.703
180.00	18.50	0.6	0.4	150.00	15.571
195.03	26.35	0.7	0.2	155.00	15.775
200.03	28.70	0.7	0.2	165.00	10.701
205.00	30.89	0.7	0.2	170.00	8.263
210.03	33.01	0.8	0.2	180.00	5.337
220.04	36.90	0.8	0.1	190.00	3.934
240.04	43.83	0.9	0.1	195.00	3.242
260.05	49.92	1.3	0.1	200.00	3.185
270.05	52.20	1.9	0.1	205.00	2.751
290.06	57.13	1.7	0.1	210.00	2.474
300.00	59.12	2.5	0.1	220.00	2.061
320.00	64.42	3.7	0.1	230.00	1.548
360.00	69.97	6.8	0.1	240.00	0.945
462.50	71.43	5.2	0.1	250.00	0.617
502.50	74.26	2.1	0.1	260.00	2.736
522.50	72.73	2.6	0.1	270.00	2.100
540.00	72.69	4.1	0.1	290.00	2.428
560.00	72.65	5.6	0.0	300.00	2.217
590.00	76.20	9.3	0.1	320.00	2.006
600.00	70.55	3.8	0.1	350.00	1.977







Notes

A. 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.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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Coaxial Low Pass Filter SLP-150+

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)
10.0	0.06	27.96
50.0	0.22	20.10
100.0	0.43	15.82
105.0	0.46	15.29
110.0	0.49	15.21
115.0	0.47	15.51
120.0	0.49	16.13
125.0	0.47	16.85
130.0	0.49	17.59
135.0	0.52	17.86
140.0	0.57	17.24
145.0	0.65	15.42
149.0	0.80	13.21
150.0	0.86	12.60
155.0	1.28	9.30
160.0	2.11	6.23
165.0	3.52	3.91
170.0	5.56	2.38
175.0	7.98	1.49
180.0	10.60	1.02
195.0	18.24	0.52
199.0	20.11	0.46
200.0	20.57	0.46
225.0	30.80	0.30
250.0	39.21	0.25
251.0	39.49	0.25
252.0	39.81	0.25
253.0	40.11	0.26
1000.0	81.91	0.17
1500.0	73.33	0.24
2000.0	64.06	0.30
2500.0	50.22	0.29
3000.0	31.02	0.37

FREQUENCY (MHz)	GROUP DELAY (nsec)
10.0	5.720
50.0	5.670
100.0	6.540
105.0	6.680
110.0	6.890
115.0	7.100
120.0	7.370
125.0	7.750
130.0	8.130
135.0	8.630
140.0	9.250
145.0	10.020
149.0	10.840
150.0	11.060
155.0	12.120
160.0	12.800
165.0	12.580
170.0	11.320
175.0	9.580
180.0	7.920
195.0	4.710
199.0	4.220
200.0	4.090
225.0	2.390
250.0	1.660
251.0	1.600
252.0	1.640
253.0	1.670
1000.0	0.330
1500.0	0.820
2000.0	0.230
2500.0	0.500
3000.0	3.600

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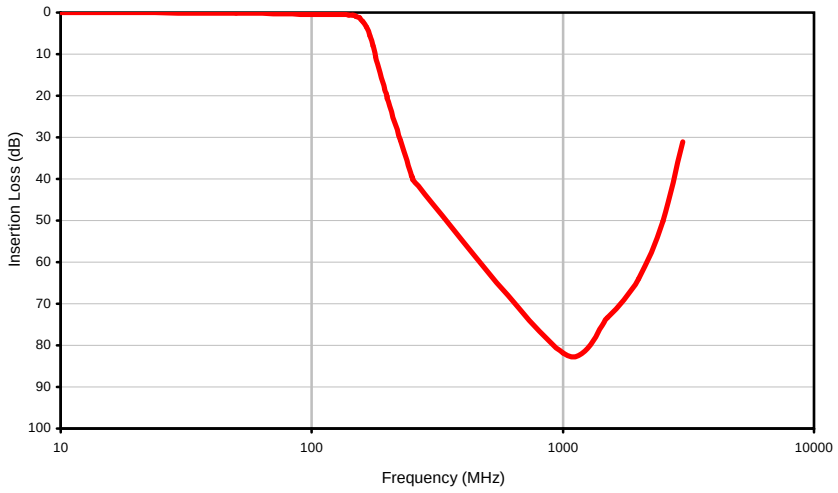
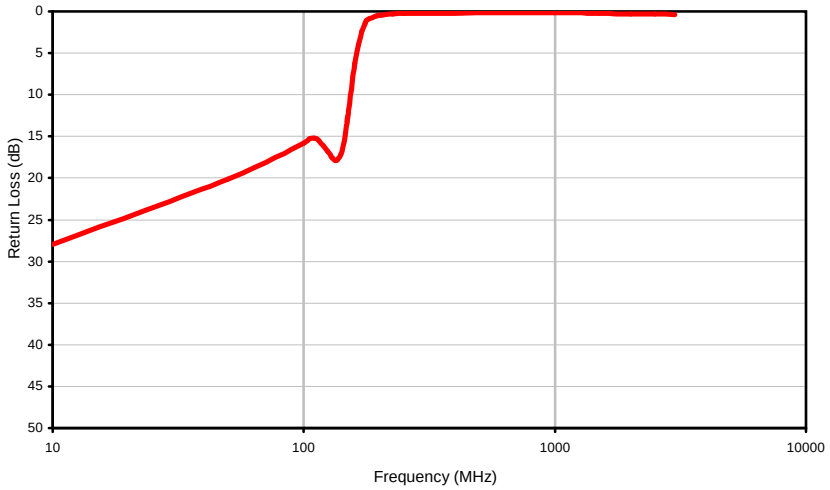
Coaxial Low Pass Filter SLP-150+

Typical Performance Curves

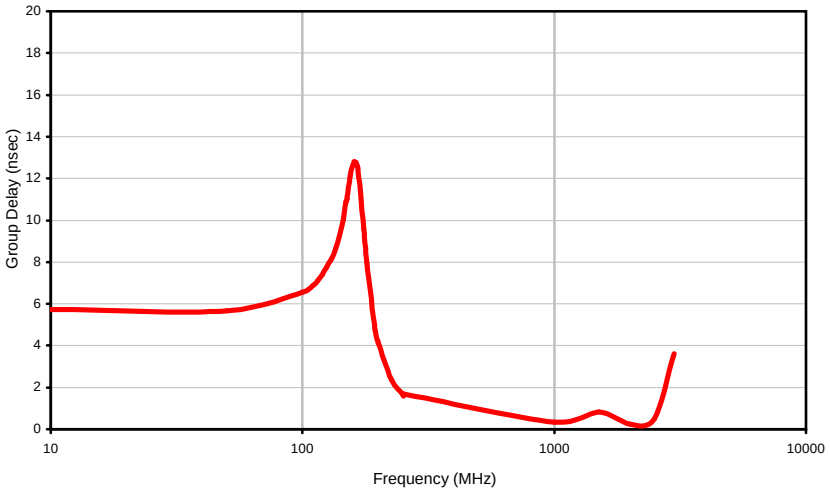
Insertion Loss



Return Loss



Group Delay



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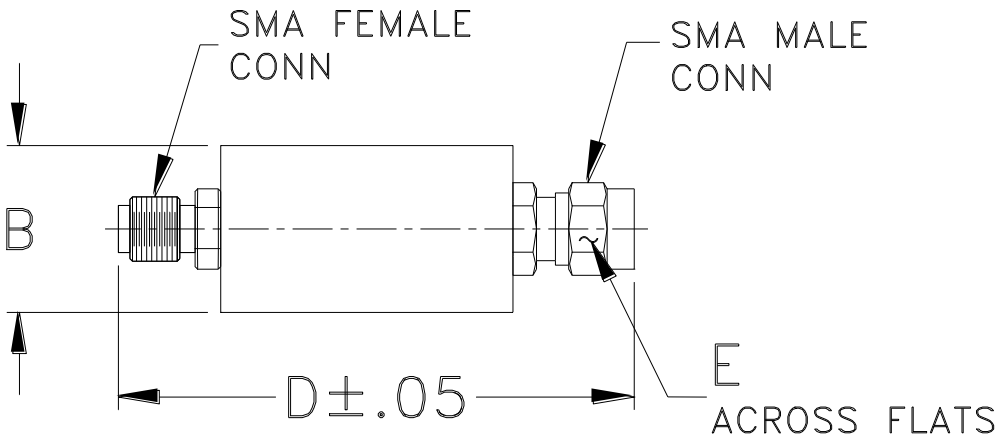
FF56
FF99

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.

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Environmental Specifications ENV28

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

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