

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

- Rugged Shielded Case
- Other NLP Models Available with Wide Selection of Cut-Off Frequencies

Applications

- Lab Use
- Test Equipment
- Video Equipment

NLP-800+



Generic photo used for illustration purposes only

CASE STYLE: FF57

Connectors Model

N-Type NLP-800+

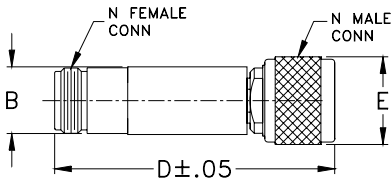
+RoHS Compliant

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

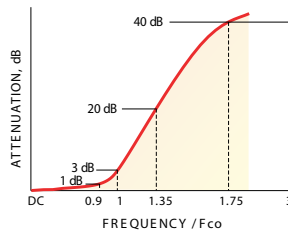
Outline Drawing



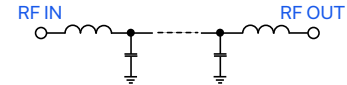
Outline Dimensions (inch/mm)

B	D	E	wt
.70	2.90	.82	grams
17.78	73.66	20.83	90.0

typical frequency response

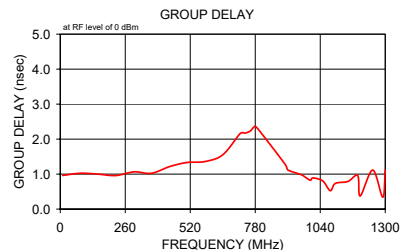
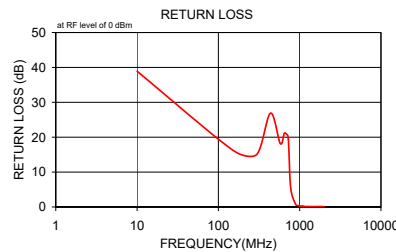
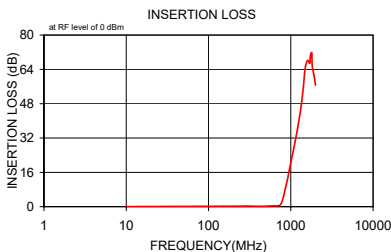


electrical schematic



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



Notes

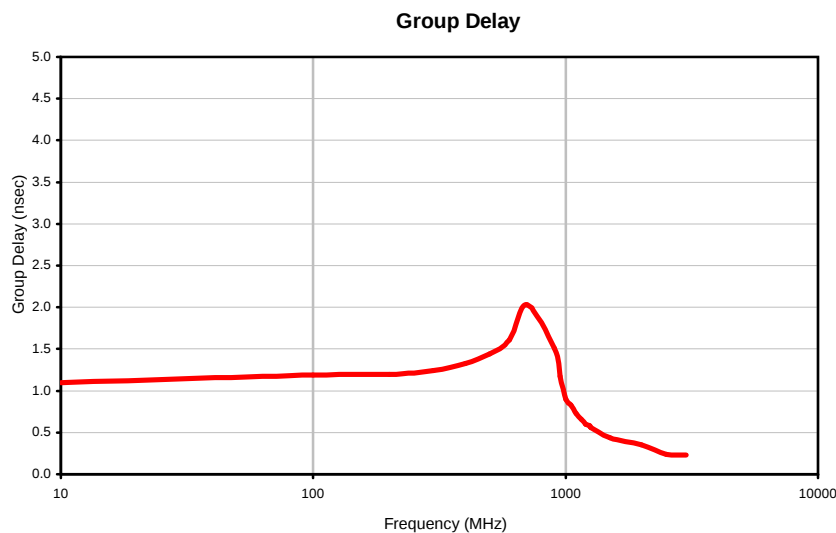
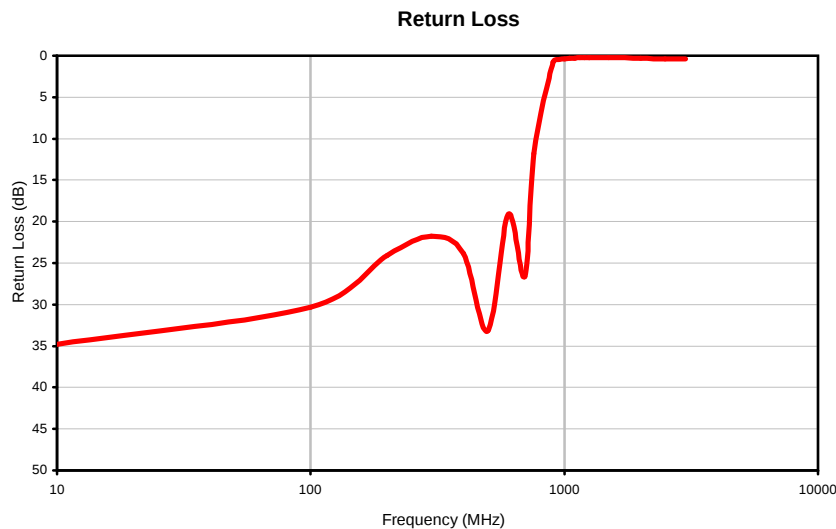
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 C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. 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



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	900.0	1.510
900.0	12.12	0.74	950.0	1.170
950.0	17.08	0.45	1000.0	0.900
1000.0	21.70	0.36	1050.0	0.830
1050.0	25.91	0.29	1100.0	0.730
1100.0	29.86	0.29	1150.0	0.660
1150.0	33.55	0.27	1200.0	0.600
1200.0	37.05	0.25	1240.0	0.580
1250.0	40.40	0.27	1250.0	0.570
1260.0	41.02	0.26	1260.0	0.560
1500.0	54.46	0.26	1500.0	0.440
2000.0	68.05	0.33	2000.0	0.350
2500.0	66.83	0.35	2500.0	0.240
3000.0	64.08	0.38	3000.0	0.230

Typical Performance Curves



IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED RoHS compliant
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REV. X1
NLP-800+
060925
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Outline Dimensions



CASE #.	A	B	C	D	E	WT GRAMS
FF57	--	.70 (17.78)	--	2.90 (73.66)	.82 (20.83)	90.0

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

Note:

1. Case material: Stainless steel.



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