

Low Pass Filter

BLP-600+

50Ω DC to 580 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

- rugged shielded case
- other standard and custom PLP models available with wide selection of fco

Applications

- test equipment
- lab use
- transmitters/receivers
- military/hi-rel applications



Generic photo used for illustration purposes only

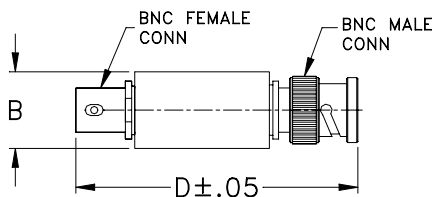
CASE STYLE: FF55

Connectors	Model
BNC	BLP-600+

+RoHS Compliant

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

Outline Drawing



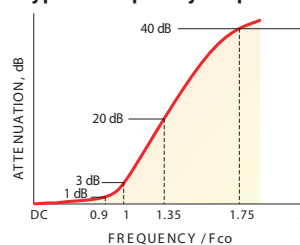
Outline Dimensions (inch/mm)

B	D	wt
.54	2.59	grams
13.72	65.79	40.0

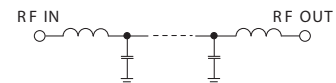
Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
(loss < 1 dB)	(loss 3 dB)	(loss > 20 dB)	(loss > 40 dB)	Passband Typ.	Stopband Typ.
DC-580	640	840-1120	1120-2000	1.7	18

typical frequency response

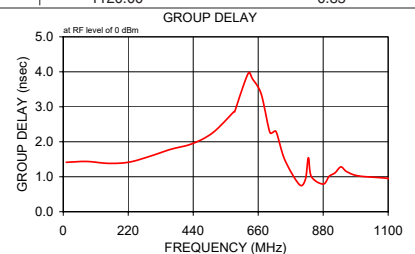
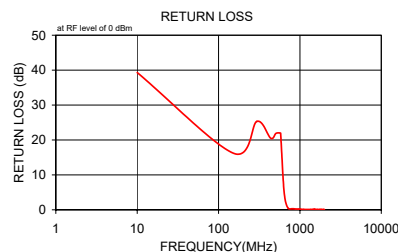
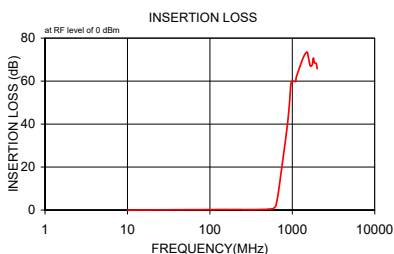


electrical schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	σ		
10.00	0.01	0.1	10.00	1.41
152.50	0.22	0.2	80.00	1.44
295.00	0.20	0.1	152.50	1.38
437.50	0.28	0.1	222.50	1.42
507.50	0.37	0.1	295.00	1.59
577.50	0.59	0.1	365.00	1.79
580.00	0.60	0.1	437.50	1.95
620.00	1.50	0.3	507.50	2.27
640.00	2.98	0.4	577.50	2.86
670.00	7.09	0.6	580.00	2.85
720.00	15.52	2.0	600.00	3.36
800.00	28.44	4.7	620.00	3.84
820.00	31.52	5.4	630.00	3.98
830.00	33.06	5.7	640.00	3.81
840.00	34.63	6.1	670.00	3.37
880.00	41.22	8.0	700.00	2.26
920.00	48.84	9.9	720.00	2.30
960.00	58.62	9.9	750.00	1.48
1000.00	59.95	9.9	800.00	0.77
1100.00	59.89	8.4	820.00	0.93
1120.00	62.05	8.8	830.00	1.54
1360.00	71.05	2.3	840.00	1.00
1502.50	73.53	9.3	880.00	0.79
1572.50	70.71	4.9	900.00	1.01
1650.00	67.12	3.4	920.00	1.11
1750.00	67.73	7.7	940.00	1.28
1800.00	70.74	9.5	960.00	1.15
1850.00	68.64	9.1	1000.00	1.02
1950.00	68.21	7.1	1100.00	0.95
2000.00	65.82	4.6	1120.00	0.85



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.
 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



Coaxial Low Pass Filter

BLP-600+

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
10.0	0.01	39.30	10.0	1.410
152.5	0.22	16.20	80.0	1.440
295.0	0.20	25.30	152.5	1.380
437.5	0.28	20.50	222.5	1.420
507.5	0.37	21.90	295.0	1.590
577.5	0.59	22.00	365.0	1.790
580.0	0.60	21.90	437.5	1.950
620.0	1.50	9.60	507.5	2.270
640.0	2.98	5.10	577.5	2.860
670.0	7.09	2.10	580.0	2.850
720.0	15.52	0.40	600.0	3.360
800.0	28.44	0.30	620.0	3.840
820.0	31.52	0.30	630.0	3.980
830.0	33.06	0.30	640.0	3.810
840.0	34.63	0.30	670.0	3.370
880.0	41.22	0.20	700.0	2.260
920.0	48.84	0.20	720.0	2.300
960.0	58.62	0.20	750.0	1.480
1000.0	59.95	0.20	800.0	0.770
1100.0	59.89	0.10	820.0	0.930
1120.0	62.05	0.10	830.0	1.540
1360.0	71.05	0.10	840.0	1.000
1502.5	73.53	0.20	880.0	0.790
1572.5	70.71	0.10	900.0	1.010
1650.0	67.12	0.10	920.0	1.110
1750.0	67.73	0.10	940.0	1.280
1800.0	70.74	0.10	960.0	1.150
1850.0	68.64	0.10	1000.0	1.020
1950.0	68.21	0.10	1100.0	0.950
2000.0	65.82	0.10	1120.0	0.850

REV. X1
BLP-600+
060724
Page 1 of 1



Mini-Circuits®
IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS9100 CERTIFIED • RoHS compliant

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

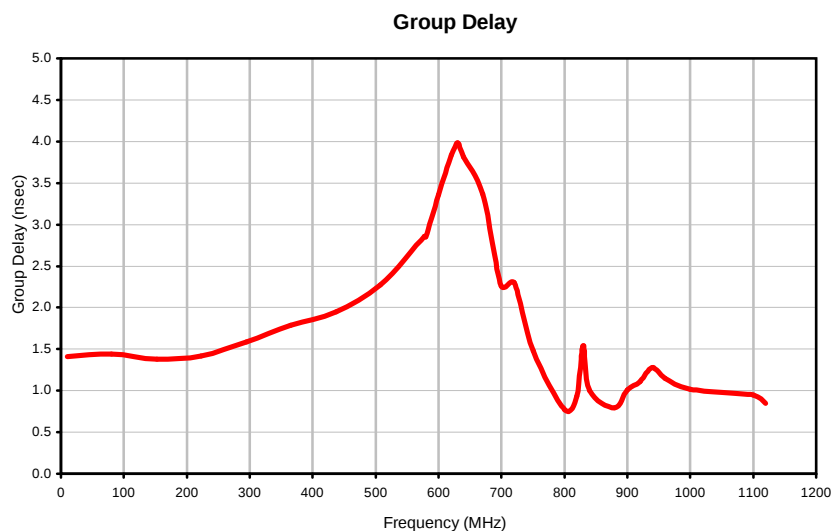
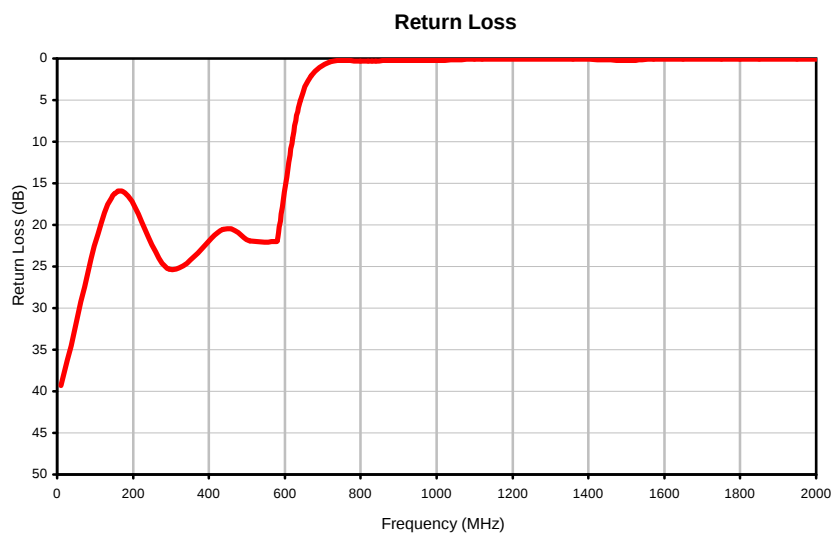
The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



Coaxial Low Pass Filter

Typical Performance Curves

BLP-600+



REV. X1
BLP-600+
060724
Page 1 of 1



Mini-Circuits®
IF/RF MICROWAVE COMPONENTS • ISO 9001 ISO 14001 AS 9100 CERTIFIED • RoHS compliant
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

The Design Engineers Search Engine finds the model you need, Instantly • For detailed performance specs & shopping online see



Outline Dimensions



CASE #.	A	B	C	D	E	WT GRAMS
FF55	--	.57 (14.47)	--	2.59 (65.79)	--	40.0

Dimensions are in inches (mm). Tolerances: 2Pl. +.03/-.04; 3Pl. ± .015

Note:

- 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