# Coaxial Low pass Filter

DC to 44 MHz  $50\Omega$ 



Generic photo used for illustration purposes only CASE STYLE: FF55

# **The Big Deal**

- High rejection
- Sharp cut-off
- Connectorized package

## **Product Overview**

BLP-44+ is a 50Ω Low pass filter in a connectorized package covering DC to 44 MHz. This filter build with high Q capacitors and wire welded inductors for with reliability. This filter offers sharp rejection and low insertion loss for use in test and measurement system applications.

# **Key Features**

Feature	Advantages
High rejection	Attenuates unwanted spurious and harmonics
Sharp cut-off	This enables the filter rejects the near band interaction and provides the high selectivity.
Connectorized package	Easy to interface with other devices and well suited for test setups

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

# ow pass Filter

 $50\Omega$ DC to 44 MHz



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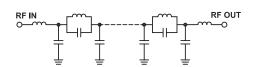
#### **Features**

- · High rejection
- · Sharp cut-off
- · Rugged shielded case

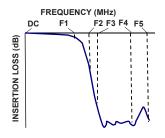
#### **Applications**

- Defense communications
- Receivers / Transmitters
- · Harmonic rejection

### **Functional Schematic**



#### **Typical Frequency Response**



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

# Electrical Specifications at 25°C

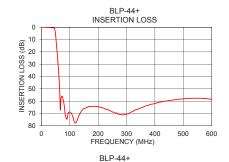
Parameter		F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC - 44	_	0.6	1	dB
	Freq. Cut-Off	F2	48.5	_	3.0	_	dB
	VSWR	DC-F1	DC - 44	_	1.2	1.5	:1
Stop Band	Rejection Loss	F3-F4	59 - 65.5	20	30	_	dB
		F4-F5	65.5 - 600	40	46	_	dB
	VSWR	F3-F5	59 - 600	_	20	_	:1

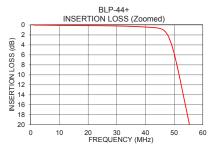
Maximum Ratings			
Operating Temperature	-40°C to 85°C		
Storage Temperature	-55°C to 100°C		
RF Power Input	0.5 W Max		

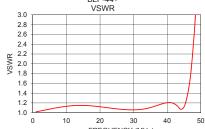
Permanent damage may occur if any of these limits are exceeded.

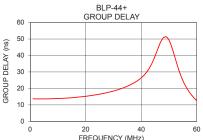
#### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1.0	0.03	1.02	1	13.69
10.0	0.08	1.13	4	13.65
20.0	0.13	1.12	6	13.67
25.0	0.15	1.08	8	13.75
30.0	0.19	1.06	10	13.88
35.0	0.27	1.11	12	14.03
44.0	0.59	1.07	14	14.24
48.5	3.03	3.12	16	14.51
56.0	21.93	38.01	18	14.84
59.0	30.57	54.13	20	15.23
60.0	33.61	58.92	22	15.69
65.5	57.57	82.04	24	16.22
100.0	68.76	135.59	26	16.85
300.0	70.36	74.61	28	17.55
420.0	60.65	67.14	30	18.42
450.0	59.40	67.44	32	19.43
480.0	58.59	66.39	34	20.65
500.0	58.11	65.75	36	22.13
540.0	57.62	66.61	40	26.43
600.0	58.60	66.70	44	35.77









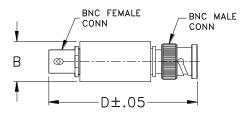
Notes
FREQUENCY (MHz)
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**Low Pass Filter BLP-44+** 

#### **Pad Connections**

PORT - 1	BNC-MALE
PORT - 2	BNC-FEMALE

## **Outline Drawing**



#### Outline Dimensions (inch )

Α	В	С	D	E	Wt.
	0.57		2.59		grams
	14.47		65.79		40

Note: Please refer to case style drawing for details

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