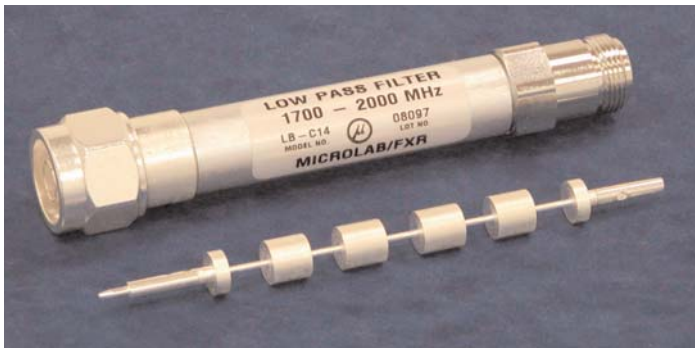
Low Pass Filters, LB series

Reliable Rod and Bead Design
400 - 2,000 MHz Cut-Off

- 500 Watt Average Power Rating
- Minimal RF Insertion Loss
- High Power
- N Standard
- BNC, TNC, or SMA options
- Special filters for Wireless see LB wireless data

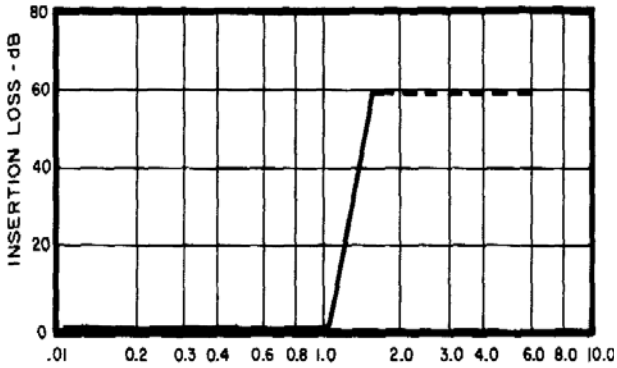


Microlab Model LB series low pass filters are designed to suppress harmonics and out of band noise and interference, to improve signal quality in high power system applications and bench testing.

The rod and bead filter is constructed of alternate lengths of high and low impedance transmission lines tuned to provide the proper frequency response. Careful design of the matching end sections ensures a low loss pass band response down to at least 40% of the cut-off frequency. In the stop band rejection of at least 55 dB occurs at 150% of cut-off and extends typically for several octaves. When compared to lumped element construction, the single piece rod and bead filter has far fewer solder joints, is better supported, and operates cooler with a better VSWR.

Options for special cut-off frequencies, special low pass responses, different polarity or alternate connectors are available on request. Note that choice of connectors may limit power. (8/08)

Typical Performance



Frequency/Cut-Off Frequency, MHz

Pass Band:	0.4fc - 1.0fc
VSWR:	1.30:1 max.
Insertion Loss:	0.2 dB max.
Stop Band Rejection:	
At 1.2 fc:	25 dB min.
At 1.5 fc	55 dB min.
Power Rating:	500 W avg., 10 kW peak
Temperature Range:	-55°C to +150°C
Connectors:	N (m-f) type standard
Connector Finish:	Silver or tri-plate
Housing Finish:	Silver or tri-plate

Alternate Connector Specifications

Connector/Suffix		Typical Model Number	Weight Difference oz (g)
N type	N	**LB-04N**	Reference
BNC*	B	**LB-04B**	-2 (-54)
TNC*	T	**LB-04T**	-2 (-54)
SMA	F	Not Available	

*to special order

Model Selection

Model Number	Cut-Off* MHz	Length in (mm)	Weight oz (g)
LB-04N	400	17.7 (450)	15 (420)
LB-07N	700	11.2 (285)	10 (280)
LB-10N	1000	8.6 (218)	8 (224)
LB-15N	1500	6.6 (168)	6 (168)
LB-20N	2000	5.6 (142)	6 (168)

*below 700 MHz +4,-0%, 700 MHz and above +2,-0%

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