

# 4<sup>th</sup> Order Tubular Bessel Lowpass Filters



RLC Electronics' now offers 4<sup>th</sup> Order Tubular Bessel Lowpass Filters with 3dB cutoffs of up to 2X cutoff of our LB series. Computer design and tubular construction allow us to maintain excellent delay characteristics with reasonable rejection while extending our 3dB cutoff and eliminating unwanted spurious response. These

filters should be regarded as compromise designs for pulsed systems where truthful reproduction of the pulse shape is important. Primarily used on lightwave receivers to reduce the impact of higher order distortion and noise. These high frequency filters are essential for today's high bit rate applications.

## Specifications LBT-1

Model No.	-3dB Cut-off Frequency (MHz)	f/fc	Attenuation	Attenuation Accuracy (dB)
LBT-	1000 to 4000	.2	-0.1	±.2
		.4	-0.4	±.2
		.6	-1.0	±.2
		.8	-1.9	±.2
		1.0	-3.0	±.2
		1.2	-4.5	±.48
		1.33	-5.7	±.59
		1.4	-6.4	±.64
		1.6	-8.5	±.74
		1.8	-10.9	±.89
		2.0	-13.4	±1.00
	4.0 to 16.0	-30.0 min	N/A	

**Power Rating:** 2 watts avg.

**Impedance:** 50 ohms

**Connector Type:** SMA Female, SMA Male

**Temperature:** -55°C to +85°C

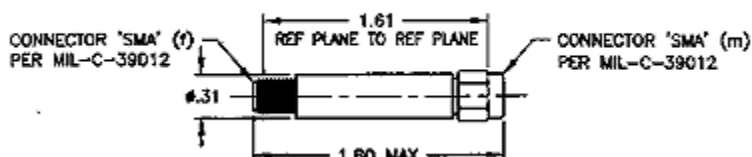
**Environment:** MIL-E-5400, Class 1A  
except operating temperature.

**To designate the filter desired use:**

(1) 3dB Cut-off frequency in MHz

Example: LBT-3700 is a 4<sup>th</sup> Order lowpass filter with a 3dB point of 3700 MHz and 1dB point @ .6 x fc 2220 MHz

### Outline



Specifications subject to change without notice

Specials requiring closer tolerances, different frequency ranges, special connectors, different materials, finishes, etc. can be furnished upon request.

Tolerances unless specified are .xx ± .02



**RLC ELECTRONICS, INC.**

83 Radio Circle, Mount Kisco, New York 10549 Telephone 914-241-1334 Fax 914-241-1753  
e-mail: sales@rlcelectronics.com