

# Ceramic Resonator Band Pass Filters



RLC Electronics' ceramic resonator filters use 6 mm. ceramic coaxial resonators to achieve cavity filter response in a reduced

size. Standard units cover the frequency range of 500 to 2500 MHz. RLC has supplied this filter type in surface mount packages.

## Specifications CRB-1-2-3-4

Model No.	Center Frequency Range (MHz)	3 dB Bandwidth (% of $f_c$ )	Number of Sections	Stopband Attenuation
CRB-	500 to 2500	1 to 12%	2 to 6	See Curves on Next Page

**VSWR:** 1.5:1

**Passband Insertion Loss (Max at  $f_c$ ):** Next Page

**Impedance:** 50 ohms

**Power Rating:** 2 watts

**Environment:** MIL-E-5400, Class 1A

**Connectors:** SMA

To designate the filter desired use:

- |                             |                                 |
|-----------------------------|---------------------------------|
| (1) Center frequency in MHz | (4) "R" for SMA 'M' and SMA 'F' |
| (2) 3dB bandwidth in MHz    | "RF" for two SMA 'F'            |
| (3) Number of section       | "RM" for two SMA 'M'            |

Example: CRB-1000-50-4-R is a 1000 MHz center frequency, 50 MHz 3 dB bandwidth, 4 section, ceramic resonator filter with one SMA 'M' and one SMA 'F' connector.

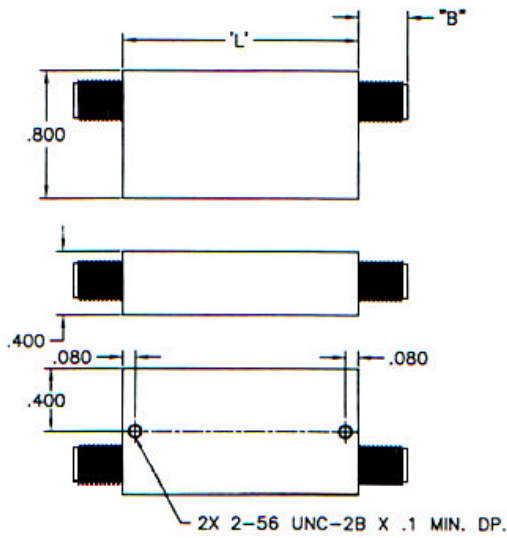


**RLC ELECTRONICS, INC.**

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

### CERAMIC RESONATOR FILTER OUTLINE

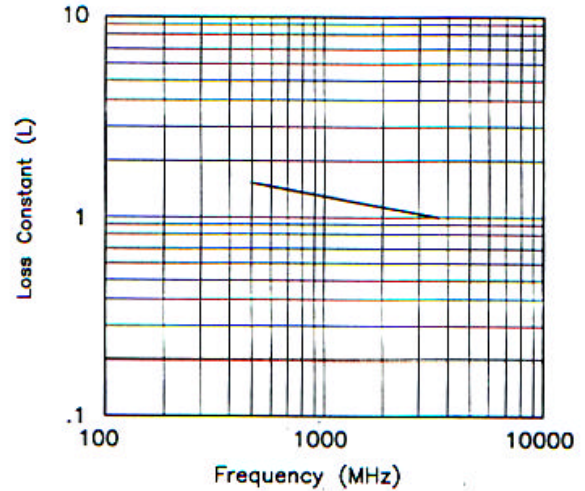
DIMENSIONS ARE IN INCHES



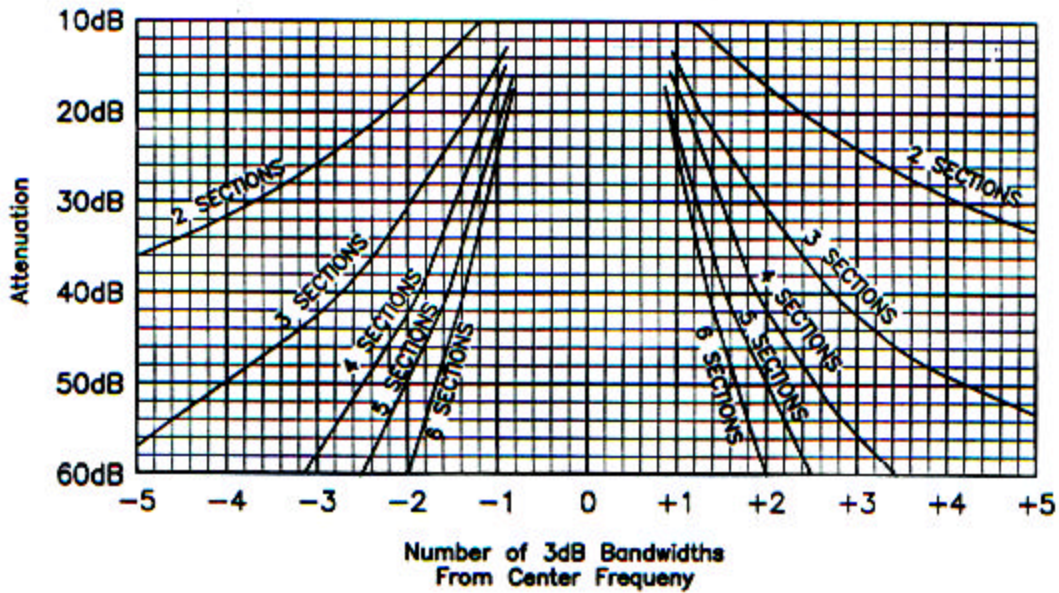
- B = .31" FOR SMA 'F'
- B = .38" FOR SMA 'M'
- L = 1.25" FOR 2 or 3 SECTIONS
- L = 1.5" FOR 4 SECTIONS
- L = 2.00" FOR 5 or 6 SECTIONS

### INSERTION LOSS

$$\text{Insertion Loss} = \frac{L \times (\text{number of sections} + .5)}{\% \text{ of 3dB bandwidth}} + 0.4\text{dB}$$



### STOPBAND ATTENUATION CERAMIC RESONATOR FILTERS



Tolerances unless otherwise specified are: .xx ± .02, .xxx ± .005



**RLC ELECTRONICS, INC.**

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