Custom Wide Band High Pass Filters

RLC Electronics' Customized Wide Band High Pass Filters are designed for operation over the frequency range of 20MHz to 18 GHz. Good VSWR in the pass band, low insertion loss, and good rejection are achieved by utilization of both distributed and lumped component techniques. Miniaturized construction makes the units suitable for many uses.

Specifications

F^{-1-2-3} R

Model Number	Cut-Off Frequency fc (MHz)	Upper** Pass Band Frequency (MHz)	Number of Sections*	20 dB Point (Typical)	40 dB Point (Typical)	60 dB Point (Typical)	3 dB Point (Typical)	Insertion Loss**
F-90	20 to 1,500	4000	2	0.50 fc	0.25 fc	X	0.70 fc	1.0
			3	0.65 fc	0.50 fc	0.35 fc	0.80 fc	1.0
			4	0.73 fc	0.62 fc	0.50 fc	0.84 fc	1.0
			5	0.78 fc	0.72 fc	0.60 fc	0.88 fc	1.0
			6	0.82 fc	0.76 fc	0.68 fc	0.90 fc	
F-100	1,500 to 6,000	18000	2	0.50 fc	0.25 fc	X	0.70 fc	1.0
			3	0.65 fc	0.50 fc	0.35 fc	0.80 fc	1.1
			4	0.73 fc	0.62 fc	0.50 fc	0.84 fc	1.2
			5	0.78 fc	0.72 fc	0.60 fc	0.90 fc	1.3

Pass Band VSWR:
F-90's 1.5 to 25 x fc(4 GHz max)
F-100's 1.8 to 5 x fc (12.4GHz max)
2.0 to 8 x fc (18.0GHz max)

Power Rating: 2 watts avg.
Impedance: 50 Ohms
Environmental: MIL-E-5400, Class 1A
Connectors: Type SMA Female

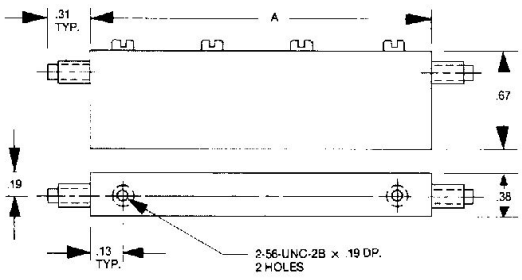
* Refers to number of filter sections N; total number of reactive elements is given by 2N+1.
** From cut off frequency to frequency where VSWR ceases to be specified

To designate the filter desired use:

1: "90" or "100" for model number
2: Cut off frequency in MHz
3: Number of sections

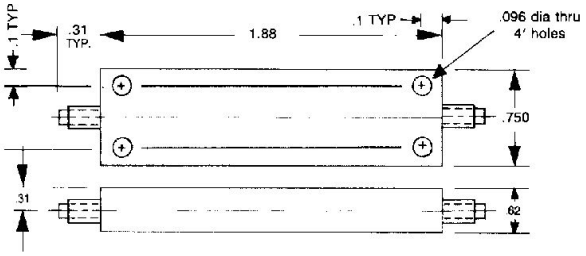
Example:F-90-100-4-R is an F-90 series, 100 - 2500 MHz pass band, 4 section filter, SMA (female) connectors.

Outline Drawing



MODEL F-100

F-100 LENGTH				
Number of Sections	2	3	4	5
"A" Dimension	.98	1.18	1.38	1.58



MODEL F-90

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

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