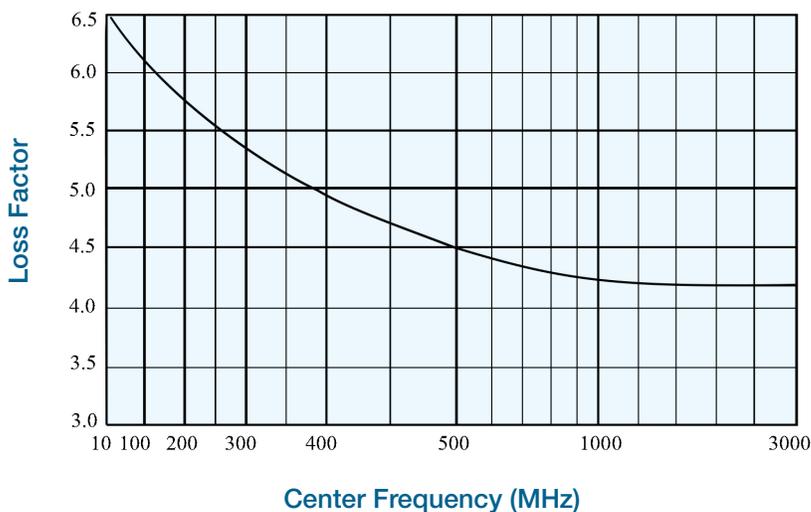


No. of Sections	2	3	4	5	6 or more
1.5/1 VSWR BW	0.4	0.7	0.8	0.85	0.9
MIN 3 dB BW					



Specification	Standard	*Special
Electrical		
Center Frequency (Fc)	1 to 5000 MHz	1 to 5000 MHz
3dB Relative Bandwidth (% of Fc)	2 to 50	2 to 100
Number of Sections Available	3 to 7	2 to 10
Nominal Impedance	50Ω	50 to 300Ω
Maximum Insertion Loss	See Curve	See Curve
Maximum VSWR	1.5/1	1.3/1
Attenuation in the Stopband	See Page 14	See Page 14
Maximum Input Power (Average) (Watts to 10,000 ft.)	2	4
Maximum Input Power (Peak) (Watts to 10,000 ft.)	20	40
Environmental		
Shock	20 G's	75 G's
Vibration	10 G's	30 G's
Humidity	95% relative	95% relative
Altitude	Unlimited	Unlimited
Temperature Range (Operating)	-40°C to + 85°C	-55°C to + 125°C
Temperature (Non-Operating)	-65°C to + 125°C	-65°C to + 150°C
Mechanical		
Approximate Weight in oz.	L x 4	L x 4
Mounting Provisions	See Next Page	See Next Page

*Contact Benchmark Lark Engineering for Special Configurations



Insertion Loss:

The maximum Insertion Loss at center frequency is equal to:

$$\frac{LF \times (N=0.5)}{\% \text{ 3 dB BW}} + 0.2$$

Where:

LF = Loss Factor N = Number of Sections

% 3dB BW:

$$\frac{3\text{dB BW (MHz)} \times 100}{\text{Center Frequency (MHz)}}$$

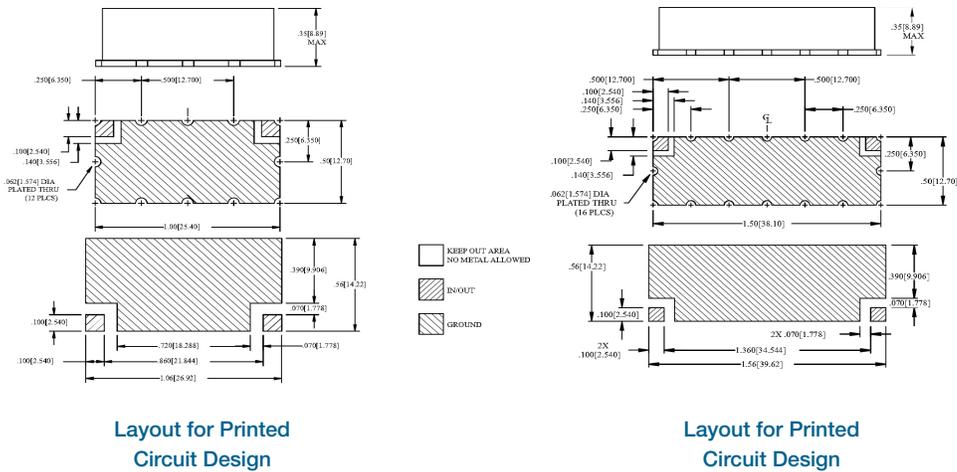
Example:

A 3 section MS with a center frequency of 50 MHz and a 3dB BW of 5 MHz would be:

$$\frac{4.0 \times 3.5}{10} \frac{22}{10} = 2.2$$

$$2.2 + 0.2 = 2.4 \text{ dB}$$

Mechanical Specifications — MS Series



Frequency Range	Number of Sections	W	L	H
1-9.9 MHz	2	0.50	1.00	0.50
	3 to 4	0.50	1.00	0.50
	5 to 6	0.50	1.50	0.50
10-50 MHz	2 to 3	0.50	1.00	0.35
	4 to 5	0.50	1.00	0.35
	6 to 7	0.50	1.50	0.35
51-100 MHz	2 to 3	0.50	0.50	0.35
	4 to 5	0.50	1.00	0.35
	6 to 7	0.50	1.50	0.35
101-300 MHz	2 to 3	0.50	0.50	0.35
	4 to 5	0.50	1.00	0.35
	6 to 7	0.50	1.50	0.35
301-1000 MHz	2 to 3	0.50	0.50	0.35
	4 to 5	0.50	0.75	0.35
	6 to 7	0.50	1.00	0.35
1001-3000 MHz	2 to 3	0.50	0.37	0.35
	4 to 5	0.50	0.75	0.35
	6 to 7	0.50	1.00	0.35

The size shown is a standard used by Lark to facilitate low cost, easily reproduced units. Should you require another size, please submit all of your requirements, both electrical and mechanical, to Benchmark Lark Engineering. This will enable Lark to quote the optimum design for your application.