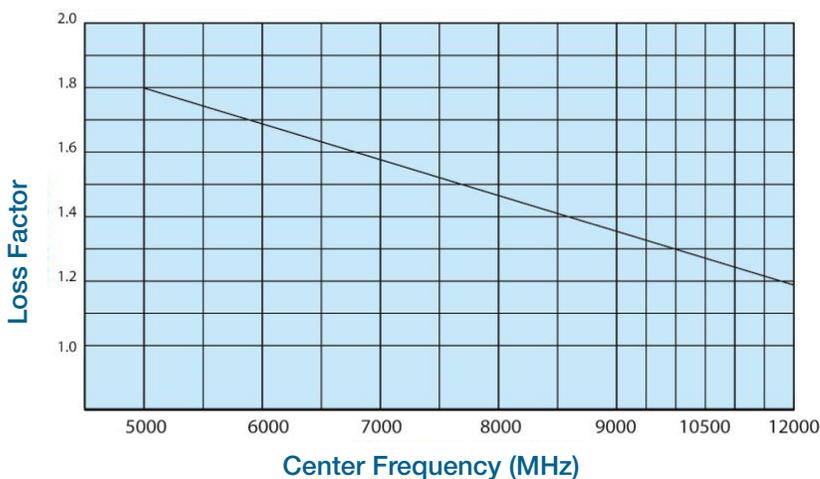


No. of Sections	2	3	4	5	6 or more
1.5/1 VSWR BW	0.4	0.7	0.8	0.85	0.9
MIN 3 dB BW					



Specification	Standard
<b>Electrical</b>	
Center Frequency (Fc)	5000 to 15000 MHz
3dB Relative Bandwidth (% of Fc)	3 to 20
Number of Sections Available (3% to 10% Bandwidth)	2 to 5
Number of Sections Available (10.1% to 20% Bandwidth)	2 to 6
Nominal Impedance	50Ω
Maximum Insertion Loss	0.5 to 1.5 db
Maximum VSWR	1.5 / 1
<b>Environmental</b>	
Shock	MIL-STD-202 Test Method 213 Condition J
Vibration	MIL-STD-202 Test Method 214 Condition I
Humidity	95% relative
Altitude	70 K
Temperature Range (Operating)	-40°C to + 85°C
Temperature (Non-Operating)	-54°C to + 100 °C
<b>Mechanical</b>	
Approximate Weight	L x H x 13.5
Mounting Provisions	See page next page

\*Contact Benchmark Lark Engineering for Special Configurations



### Insertion Loss:

The maximum Insertion Loss at center frequency is equal to:

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

Where:

LF = Loss Factor N = Number of Sections

% 3dB BW:

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

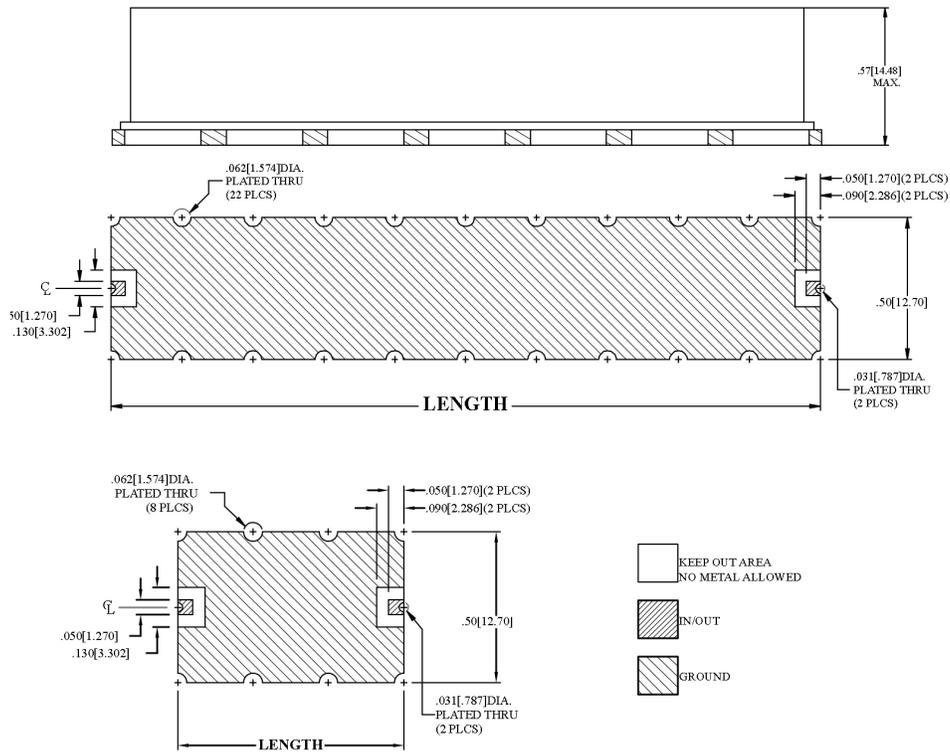
Example:

A 5 section SMC with a center frequency of 6000 MHz and a 3dB BW of 600 MHz would be:

$$\frac{1.64 \times 5.5}{10} = 0.9 \text{ dB}$$

$$.9 + 0.2 = 1.10 \text{ dB}$$

# Mechanical Specifications — SMC Series



## SMC Series Lengths

% of Bandwidth	2 Section	3 Section	4 Section	5 Section	6 Section
3% TO 5%	1"	1 1/4"	1 3/4"	2 1/8"	NA
5.1% TO 10%	3/4"	1 1/8"	1 1/2"	2"	NA
10.1% TO 20%	3/4"	1 1/8"	1 1/2"	1 3/4"	2 1/8"