

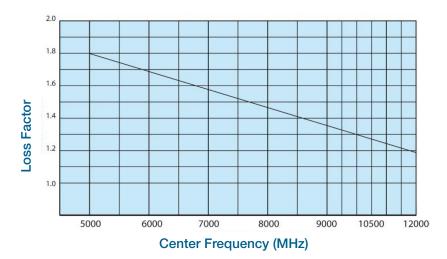
 No. of Sections
 2
 3
 4
 5
 6 or more

 1.5/1 VSWR BW
 0.4
 0.7
 0.8
 0.85
 0.9

 MIN 3 dB BW

LARK ENGINEERING SMC6000-500-5CC 25753-01

Specification	Standard		
Electrical			
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		
Environmental			
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		
Mechanical 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:

Where:

LF = Loss Factor N = Number of Sections % 3dB BW:

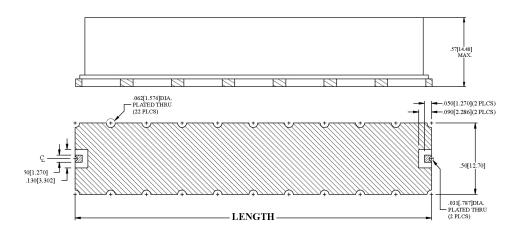
3dB BW (MHz) x 100 Center Frequency (MHz)

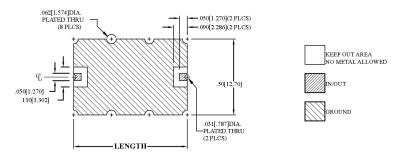
Example:

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 Lenghts							
% 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"		

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