

This file has been cleaned of potential threats.

If you confirm that the file is coming from a trusted source, you can send the following SHA-256 hash value to your admin for the original file.

f97470d3bec17e7094e4e67c49cf042140cbad6cc81786f5df95c1b7d0c21e2b

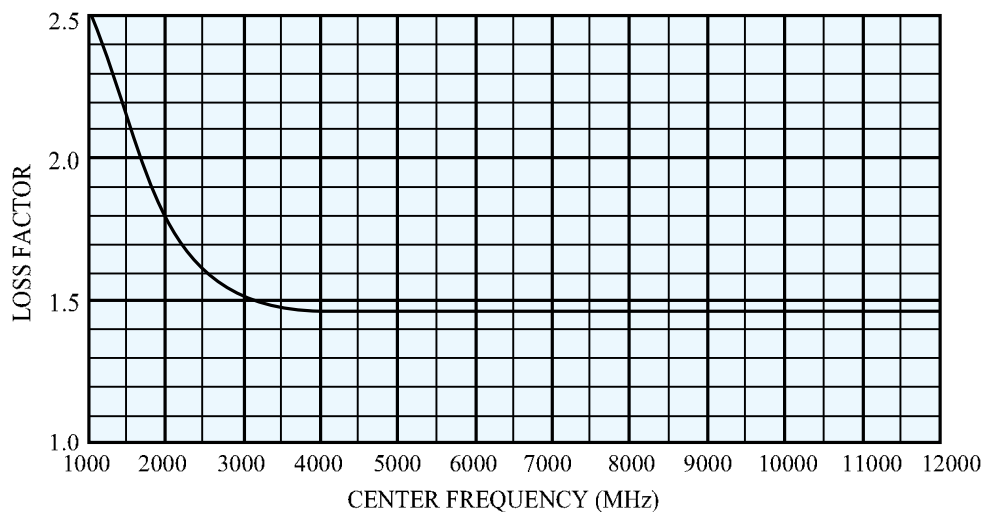
To view the reconstructed contents, please SCROLL DOWN to next page.



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					

SPECIFICATIONS	STANDARD	*SPECIAL
ELECTRICAL		
Center Frequency (Fc)	1000 to 18000 MHz	1000 to 18000 MHz
3dB Relative Bandwidth (% of Fc)	0.25 to 50	0.25 to 70
Number of Sections Available	3 to 8	2 to 14
Nominal Impedance	50	50
Maximum Insertion Loss	See Curve	See Curve
Maximum VSWR	1.5/1	1.3/1
Attenuation in the Stopband	See Page 32	See Page 32
Maximum Input Power (Average) (Watts to 10,000 ft.)	10% of peak	See Standard
Maximum Input Power (Peak) (Watts to 10,000 ft.)	$\frac{500 \times 3 \text{ dB BW (MHz)}}{F_c \text{ (MHz)}}$	See Standard
ENVIRONMENTAL		
Shock	25 G's	50 G's
Vibration	10 G's	20 G's
Humidity	95% relative	100% 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.	0.5 x H x L	0.5 x H x L
Mounting Provisions	See Next Page	See Next Page
Special Configurations	Consult Factory	Consult Factory

*Contact Lark Engineering



INSERTION LOSS:

The maximum Insertion Loss at center frequency is equal to:

$$\frac{LF \times (N + 0.5)}{\% \text{ 3 dB BW}} + 0.1$$

Where:

LF = Loss Factor
N = Number of Sections

% 3dB BW:

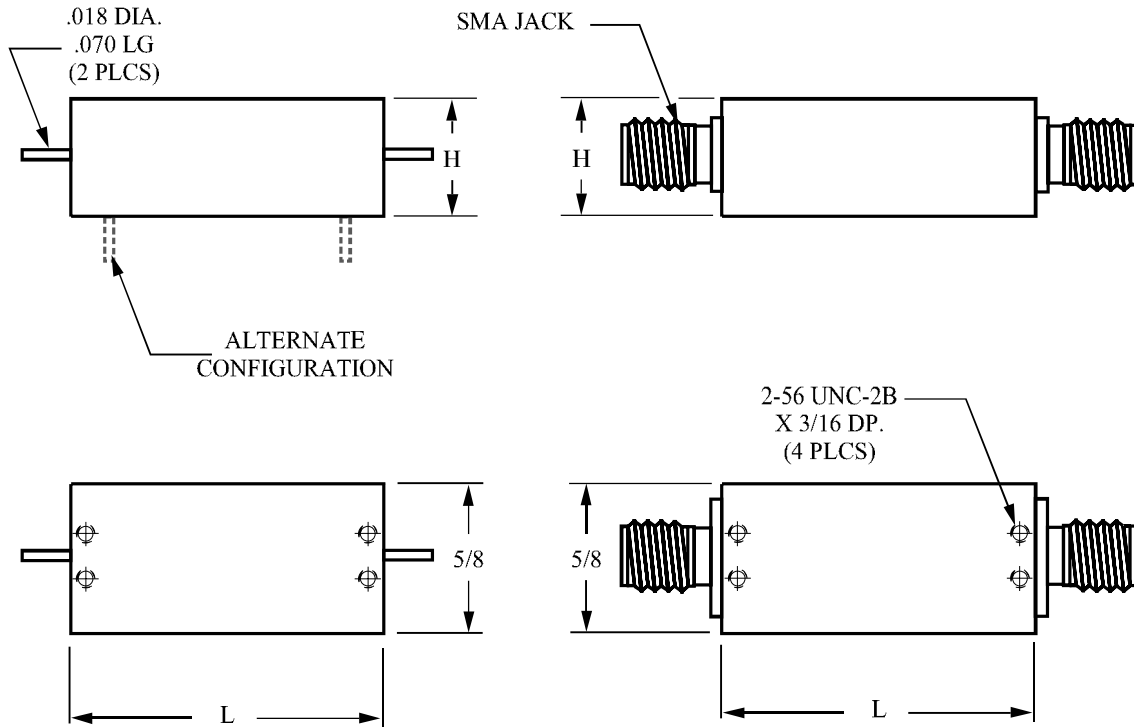
$$\frac{3\text{dB BW (MHz)} \times 100}{\text{CENTER FREQUENCY (MHz)}}$$

Example:

A 5 section 4B with a center frequency of 10000 MHz and a 3dB BW of 500 MHz would be:

$$\frac{1.45 \times 5.5}{5} = 1.6$$

$$1.6 + 0.1 = 1.7 \text{ dB}$$



$$L \text{ DIMENSION} = \frac{N \times (0.3 + 0.5)}{\% \text{ BW}} + 0.5 \text{ inch Approximately}$$

$$H \text{ DIMENSION} = \frac{1450}{F_c \text{ (MHz)}} + 0.3 \text{ inch Approximately}$$

CONNECTORS AVAILABLE ON 4B SERIES:

TYPE	DIMENSIONS		TYPE	DIMENSIONS	
	INCHES	MM		INCHES	MM
SMA JACK	.375	9.5	SOLDER PIN RADIAL SPECIAL	.070	1.8
SMA PLUG	.507	12.9			
SOLDER PIN AXIAL	.070	1.8			

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 Lark Engineering. This will enable Lark to quote the optimum design for your application.