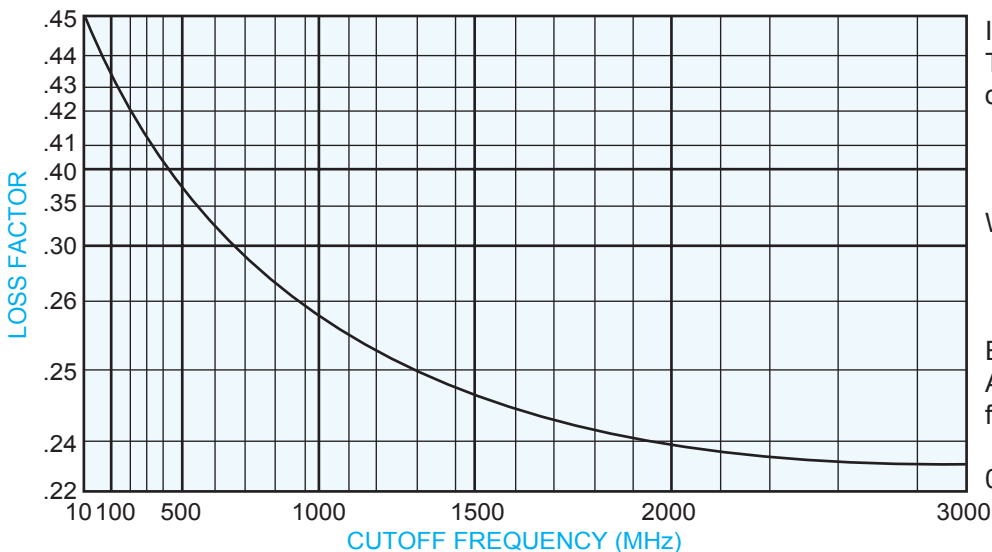




SPECIFICATIONS	STANDARD	*SPECIAL
ELECTRICAL		
Cutoff Frequency (Fco)	20 to 2000 MHz	4 to 4000 MHz
Number of Sections Available	3 to 4	2 to 6
Nominal Impedance	50Ω	50 to 300Ω
Maximum Insertion Loss	See Curve	See Curve
Maximum VSWR (0.4 Fco to Fco)	1.5/1	1.3/1
Attenuation in the Stopband	See Page 76	See Page 76
Maximum Input Power (Average) (Watts to 10,000 ft.)	2	4
Maximum Input Power (Peak) (Watts to 10,000 ft.)	20	40
ENVIRONMENTAL		
Shock	15G's	50G's
Vibration	5G's	15G's
Humidity	90% relative	100% relative
Altitude	Unlimited	Unlimited
Temperature Range (Operating)	-25°C to + 85°C	-54°C to + 100°C
Temperature (Non-Operating)	-54°C to + 100°C	-62°C to + 125 °C
MECHANICAL		
Approximate Weight	1/4 oz.	1/4 oz.
Mounting Provisions	See Next Page	See Next Page
Special Configurations	See Next Page	See Next Page

*Contact Lark Applications Engineering



INSERTION LOSS:
The maximum Insertion Loss in at cutoff frequency is equal to:

$$LF \times N + 0.05dB$$

Where:

LF = Loss Factor

N = Number of Sections

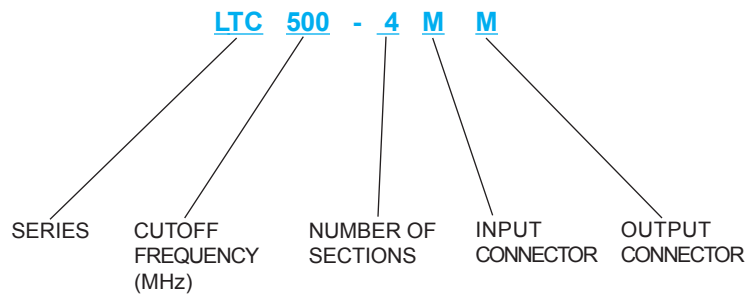
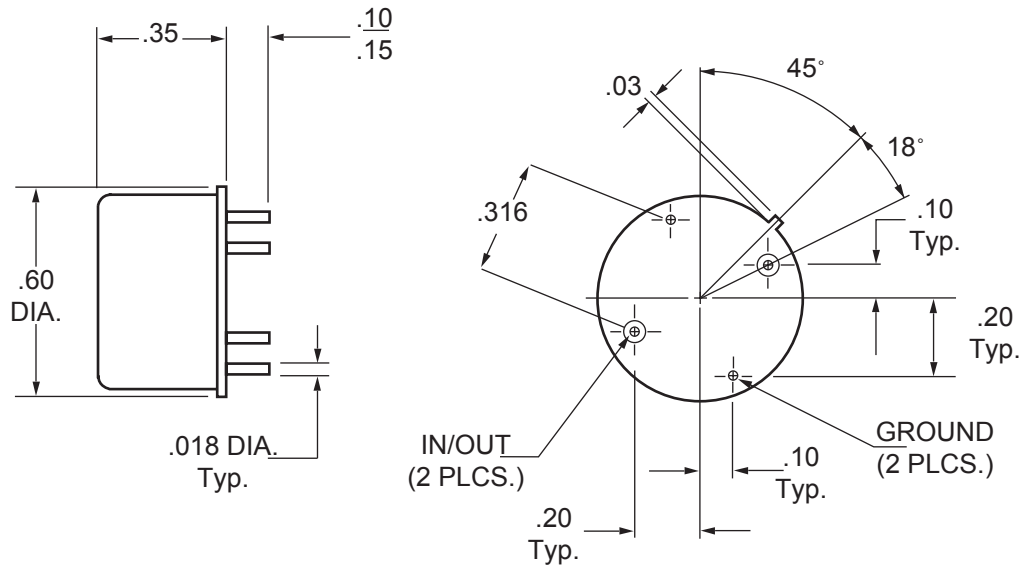
Example:

A 3 section LTC with a cutoff frequency of 500 MHz would have,

$$0.38 \times 3 = 1.14 + 0.05 = 1.2dB$$

MECHANICAL SPECIFICATIONS

LTC SERIES



MECHANICAL SPECIFICATIONS

The graph on the next page defines the normal specification limits on attenuation for Lark lowpass filter series LMC, LMS and LTC. The minimum level of attenuation in dB is shown as a function of the relative frequency.

A. Relative frequency is defined as the frequency to be attenuated divided by the normal cutoff frequency.

B. Cutoff frequency is defined as the 1.5/1 VSWR cutoff frequency (Below 1000 MHz +4%-0%; 1000 MHz and above +3%-0%).

Example:

Specify a lowpass filter to pass 1500 MHz and attenuate 2100 MHz a minimum of 30dB.

1. 2100 MHz is a relative frequency of 1.4

$$\frac{2100}{1500} = 1.4$$

2. Reading from the curve at a relative frequency of 1.4, we find that a four section filter has a normal specification limit of 34dB. Therefore, a lowpass filter with four or more sections would be required to meet the 30dB attenuation specification.

Lark manufactures many other types of lowpass filters from 100 KHz to 8 GHz. Please contact us directly or through our local sales representative with any of your filter requirements.

