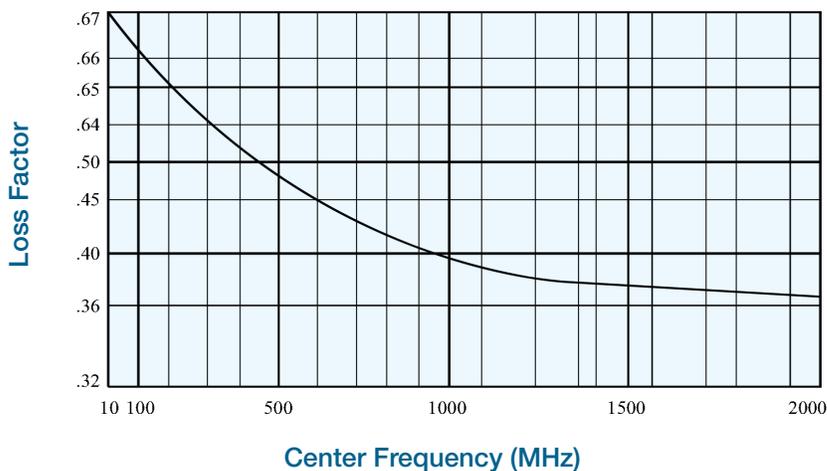




| Specification | Standard | *Special |
|---|------------------|-------------------|
| Electrical | | |
| Cut-off Frequency (Fco) | 10 to 1500 MHz | 1 to 2500 MHz |
| Number of Sections Available | 3 to 6 | 2 to 10 |
| Nominal Impedance | 50 | 50 to 100 |
| Maximum Insertion Loss | See Curve | See Curve |
| Maximum VSWR (Fco. to 3 Fco.) | 1.5/1 | 1.3/1 |
| Attenuation in the Stopband | See Page 67 | See Page 67 |
| 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 | 50 G's |
| Vibration | 10 G's | 15 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 + 125 °C |
| Mechanical | | |
| Approximate Weight in oz. | L x 4 | L x 4 |
| Mounting Provisions | See Next Page | See Next Page |
| Special Configurations | Consult Factory | Consult Factory |

*Contact Benchmark Lark Engineering for Special Configurations



Insertion Loss:

The maximum Insertion Loss at cutoff frequency is equal to:

$$LF \times N + 0.05\text{dB}$$

Where:

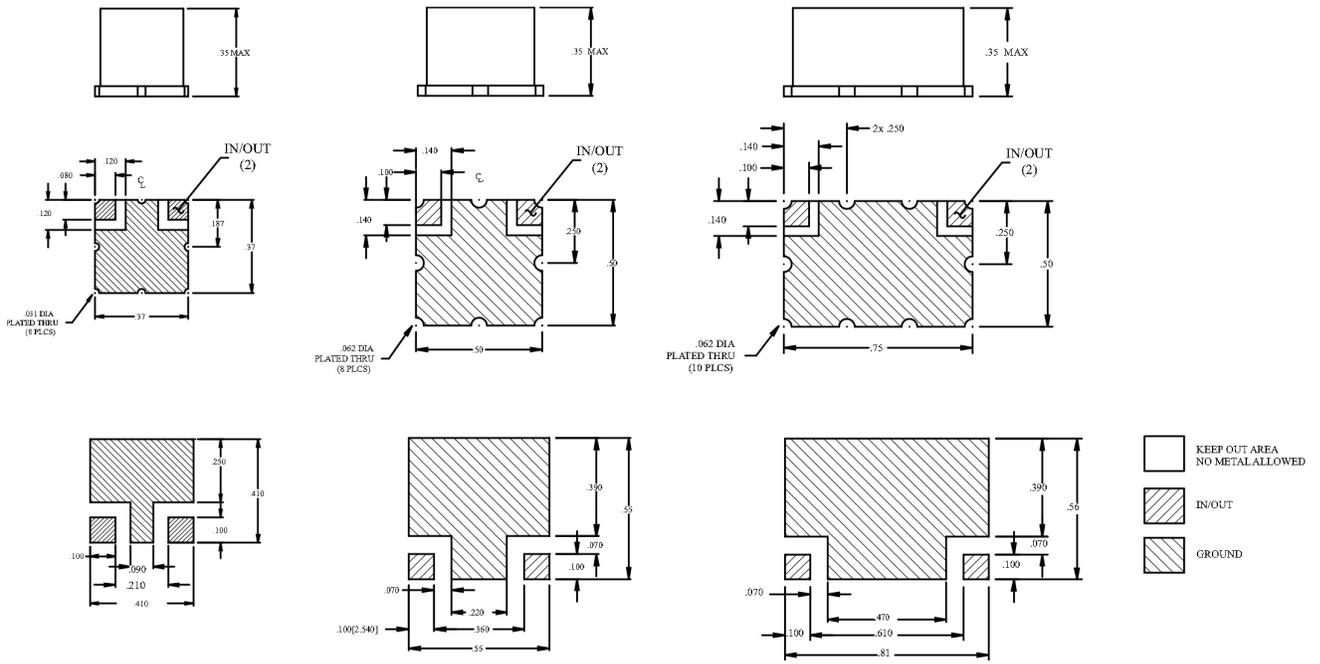
LF = Loss Factor N = Number of Sections

Example:

A 3 section HMS with a cutoff frequency of 500 MHz would be:

$$0.48 \times 3 = 1.44 + 0.05 = 1.5\text{dB}$$

Mechanical Specifications — HMS Series



| Frequency Range | Number of Sections | W | L | H |
|-----------------|--------------------|------|------|------|
| 1-9.9 MHz | 2 | 0.50 | 1.00 | 0.35 |
| | 3 to 4 | 0.50 | 1.50 | 0.35 |
| | 5 to 6 | 0.50 | 2.50 | 0.35 |
| 10-100 MHz | 2 to 3 | 0.50 | 0.75 | 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 | 0.37 | 0.37 | 0.35 |
| | 4 to 5 | 0.50 | 0.50 | 0.35 |
| | 6 to 7 | 0.50 | 0.75 | 0.35 |

For filters over 7 sections — Consult Benchmark Lark Engineering for Special Configurations

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.