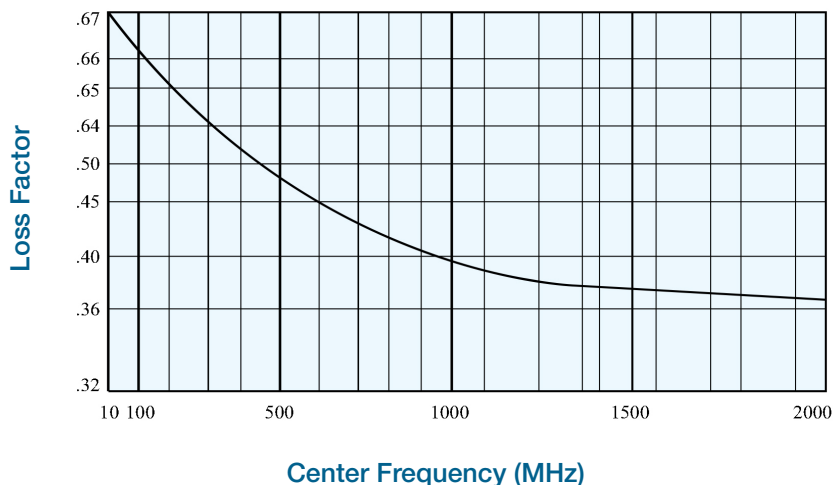




| Specification                                       | Standard         | *Special          |
|-----------------------------------------------------|------------------|-------------------|
| <b>Electrical</b>                                   |                  |                   |
| Cut-off Frequency (Fco)                             | 10 to 2000 MHz   | 1 to 3000 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                |
| <b>Environmental</b>                                |                  |                   |
| Shock                                               | 20 G's           | 50 G's            |
| Vibration                                           | 10 G's           | 15 G's            |
| Humidity                                            | 90% 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 |
| <b>Mechanical</b>                                   |                  |                   |
| Approximate Weight in oz.                           | L x 5 + 10       | L x 5 + 10        |
| 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:

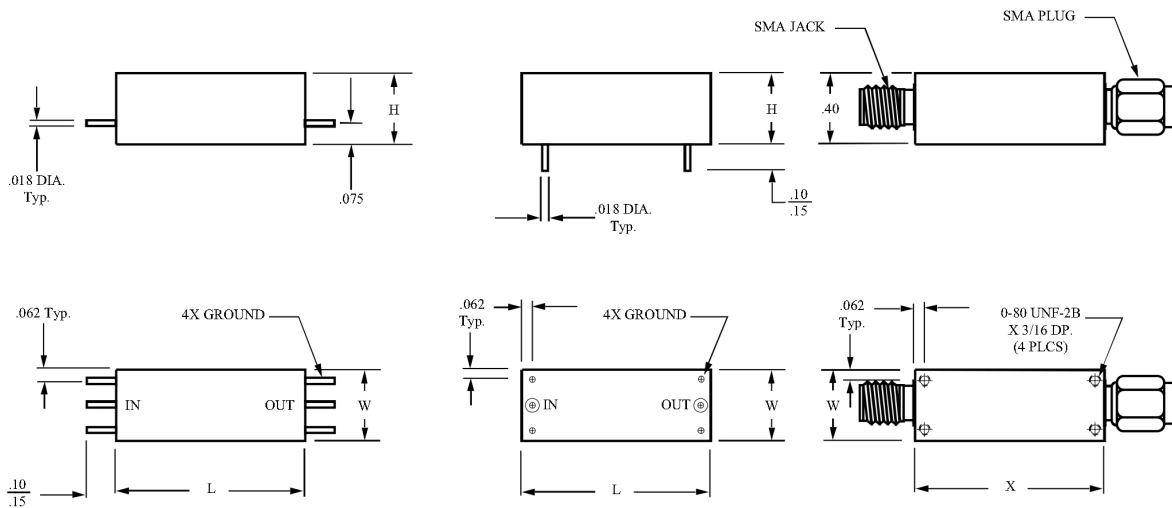
A 3 section HMC with a cutoff frequency of 500 MHz would be:

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

| Frequency Range | Number of Sections | W    | H    | L    | X    |
|-----------------|--------------------|------|------|------|------|
| 10-100 MHz      | 2 to 3             | 0.55 | 0.40 | 1.00 | 1.25 |
|                 | 4 to 5             | 0.55 | 0.40 | 1.50 | 1.75 |
|                 | 6 to 7             | 0.55 | 0.40 | 1.75 | 2.00 |
| 101-300 MHz     | 2 to 3             | 0.44 | 0.40 | 0.75 | 1.00 |
|                 | 4 to 5             | 0.44 | 0.40 | 1.00 | 1.25 |
|                 | 6 to 7             | 0.44 | 0.40 | 1.50 | 1.75 |
| 301-3000 MHz    | 2 to 3             | 0.44 | 0.31 | 0.75 | 1.00 |
|                 | 4 to 5             | 0.44 | 0.31 | 0.75 | 1.00 |
|                 | 6 to 7             | 0.44 | 0.31 | 1.25 | 1.50 |

Over 7 sections- Consult Benchmark Lark Engineering  
 Note: All Standard Units with SMA Connectors are supplied H = 0.40"

## Mechanical Specifications — HMC Series



### Connectors Available on HMC Series

Type

SMA Jack

SMA Plug

Solder Pin Axial

Type

Solder Pin Radial

Special

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

Benchmark Lark Technology

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