

## Features

- excellent power handling
- small size
- 7 sections
- temperature stable
- LTCC construction

## Applications

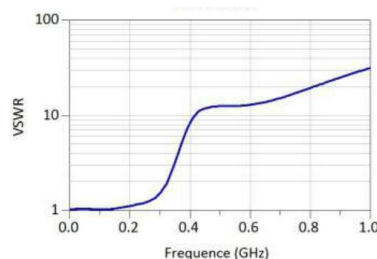
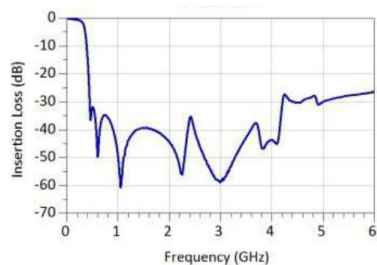
- harmonic rejection
- VHF/UHF transmitters/receivers

## Electrical Specifications at 25°C

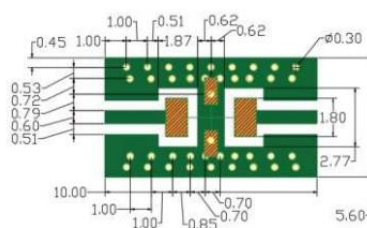
| Parameter |                | Frequency(MHz) | Min. | Typ. | Max. | Unit |
|-----------|----------------|----------------|------|------|------|------|
| Pass Band | Insertion Loss | DC-225         | -    | -    | 1.0  | dB   |
|           | Freq.Cut-Off   | 350            | -    | 3.0  | -    | dB   |
|           | VSWR           | DC-225         | -    | 1.2  | -    | :1   |
| Stop Band | Rejection Loss | 460            | 20   | -    | -    | dB   |
|           |                | 510-2500       | -    | 40   | -    | dB   |
|           | VSWR           | 5500           | -    | 20   | -    | dB   |
|           |                | 460-5500       | -    | 17   | -    | :1   |

## Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|-----------------|---------------------|-----------|
| 1               | 0.12                | 1.03      |
| 100             | 0.32                | 1.02      |
| 225             | 0.74                | 1.16      |
| 240             | 0.83                | 1.19      |
| 425             | 21.57               | 10.78     |
| 450             | 32.98               | 11.98     |
| 460             | 62.62               | 12.16     |
| 495             | 32.08               | 12.52     |
| 510             | 31.97               | 12.56     |
| 610             | 48.51               | 13.12     |
| 900             | 39.76               | 25.24     |
| 1400            | 39.84               | 52.14     |
| 2500            | 40.77               | 66.83     |
| 3220            | 52.29               | 77.73     |
| 5500            | 27.81               | 56.03     |

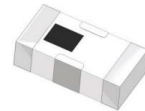


## Suggested PCB Layout



- NOTES:**
1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508"  $\pm$  .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
  2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.  
 DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)  
 DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

## JY-LFCN-225+



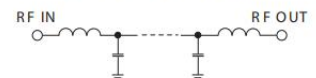
50Ω DC to 225 MHz

## Maximum Ratings

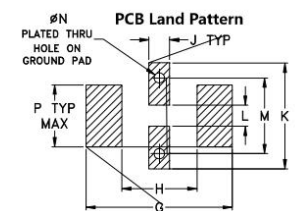
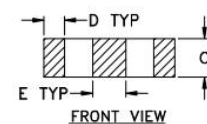
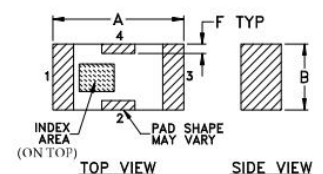
|                       |                  |
|-----------------------|------------------|
| Operating Temperature | -55°C to 100°C   |
| Storage Temperature   | -55°C to 100°C   |
| RF Power Input*       | 10W max. at 25°C |

\* Passband rating, derate linearly to 3.5W at 100°C ambient.  
Permanent damage may occur if any of these limits are exceeded.

## Electrical Schematic



## Outline Drawing



Suggested Layout  
Tolerance to be within  $\pm 0.02$

## Outline Dimensions: Unit (mm)

|   |      |   |      |    |       |
|---|------|---|------|----|-------|
| A | 3.20 | B | 1.60 | C  | 0.94  |
| D | 0.51 | E | 0.81 | F  | 0.23  |
| G | 4.29 | H | 2.21 | J  | 0.61  |
| K | 3.10 | L | 0.61 | M  | 2.21  |
| N | 0.30 | P | 1.80 | wt | 0.02g |