

## Features

- low insertion loss, 0.3dB typ. @ passband
- high rejection
- shielded case
- aqueous washable

## Applications

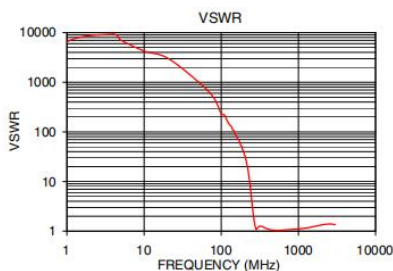
- transmitters / receivers
- sub-harmonic rejection
- military communications

## Electrical Specifications (T<sub>AMB</sub>= 25° C)

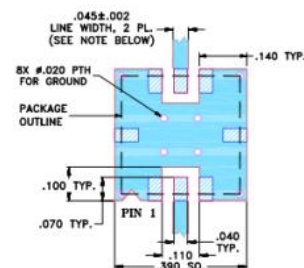
| STOP BAND<br>(MHz)      |        | FCO <sub>1</sub> (MHz)<br>Nom. | PASS BAND<br>(MHz) | VSWR<br>(:1)     |                  |
|-------------------------|--------|--------------------------------|--------------------|------------------|------------------|
| (Loss>40dB) (Loss>20dB) |        | (Loss 3dB)                     | (Loss<1dB)         | Stopband<br>Typ. | Passband<br>Typ. |
| DC-135                  | DC-180 | 250                            | 400-3000           | 18               | 1.2              |

## Typical Performance Data at 25° C

| Frequency<br>(MHz) | Insertion Loss<br>(dB) | VSWR<br>(:1) |
|--------------------|------------------------|--------------|
| 1                  | 88.73                  | 6481.29      |
| 10                 | 91.41                  | 4268.88      |
| 50                 | 86.03                  | 1031.74      |
| 100                | 65.23                  | 231.93       |
| 120                | 55.82                  | 164.17       |
| 135                | 49.07                  | 128.61       |
| 180                | 29.70                  | 53.26        |
| 200                | 21.61                  | 34.93        |
| 220                | 13.71                  | 18.83        |
| 240                | 6.51                   | 6.87         |
| 250                | 3.80                   | 3.78         |
| 260                | 2.10                   | 2.20         |
| 290                | 0.79                   | 1.11         |
| 400                | 0.45                   | 1.11         |
| 600                | 0.31                   | 1.04         |
| 1000               | 0.29                   | 1.11         |
| 2000               | 0.43                   | 1.34         |
| 3000               | 0.54                   | 1.35         |



## Suggested PCB Layout



### NOTES:

1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS .025" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

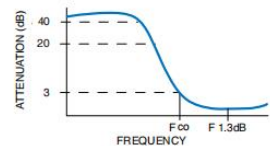
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

## JY-RHP-250+

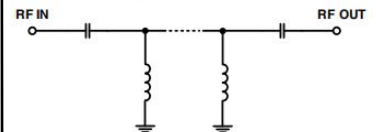


50Ω 400 to 3000 MHz

## Typical Frequency Response



## Functional Schematic



## Pin Connections

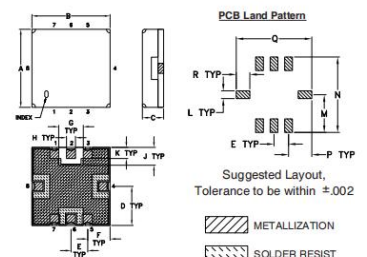
|        |                  |
|--------|------------------|
| INPUT  | 2                |
| OUTPUT | 6                |
| GROUND | 1, 3, 4, 5, 7, 8 |

## Maximum Ratings

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C  |
| Storage Temperature   | -55°C to 100°C |
| RF Power Input        | 0.5W at 25°C   |

Permanent damage may occur if any of these limits are exceeded.

## Outline Drawing



## Outline Dimensions: Unit (mm)

|    |      |      |      |   |      |
|----|------|------|------|---|------|
| A  | 8.89 | B    | 8.89 | C | 2.54 |
| D  | 4.45 | E    | 1.93 | F | 2.54 |
| G  | 2.79 | H    | 1.02 | J | 2.03 |
| K  | 1.27 | L    | 1.02 | M | 4.95 |
| N  | 9.91 | P    | 3.05 | Q | 9.91 |
| WT |      | 0.25 |      | R | 1.78 |