

Jieying Communication Technology (Shenzhen) Co., Ltd.  
<http://www.jytxjs.cn>

# Power Splitter/Combiner

## Features

- good isolation, 20 dB typ.
- good output matching, VSWR 1.35 typ.
- shielded case
- aqueous washable
- good coplanarity

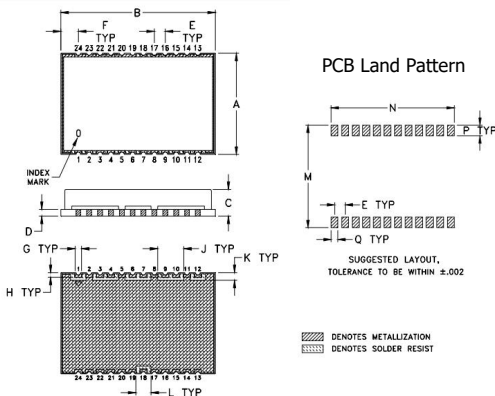
## Applications

- cellular
- ISM
- CATV
- GPS
- PCS
- wireless communication system

## Electrical Specifications at 25°C

| Parameter                                    | Frequency(MHz)       | Min.     | Typ.         | Max.       | Units  |
|----------------------------------------------|----------------------|----------|--------------|------------|--------|
| Frequency Range                              | -                    | 700      | -            | 2500       | MHz    |
| Insertion Loss<br>(above theoretical 9.0 dB) | 900-2400<br>700-2500 | -<br>-   | 1.8<br>2.8   | 2.8<br>6.0 | dB     |
| Isolation                                    | 900-2400<br>700-2500 | 14<br>10 | 20<br>14     | -<br>-     | dB     |
| Phase Unbalance                              | 900-2400<br>700-2500 | -<br>-   | 7.0<br>10    | 16<br>19   | Degree |
| Amplitude Unbalance                          | 900-2400<br>700-2500 | -<br>-   | 0.6<br>1.2   | 1.2<br>2.1 | dB     |
| VSWR (Port S)                                | 900-2400<br>700-2500 | -        | 1.7<br>1.7   | -<br>-     | :1     |
| VSWR (Port 1-8)                              | 900-2400<br>700-2500 | -<br>-   | 1.35<br>1.35 | -<br>-     | :1     |

## Outline Drawing

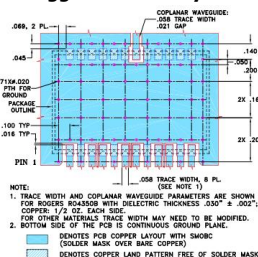


PCB Land Pattern

Outline Dimensions: Unit (mm)

|  | A     | B     | C    | D    | E    | F    | G    | Q    | H | J | K | L | M | N | P | wt  |
|--|-------|-------|------|------|------|------|------|------|---|---|---|---|---|---|---|-----|
|  | 23.62 | 36.07 | 6.35 | 1.60 | 2.54 | 4.06 | 1.52 | 1.65 |   |   |   |   |   |   |   | 6.5 |

## Suggested PCB Layout



## Electrical Schematic



## JY-SEPS-8-272+



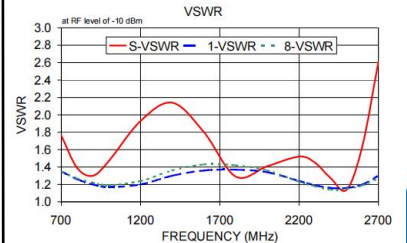
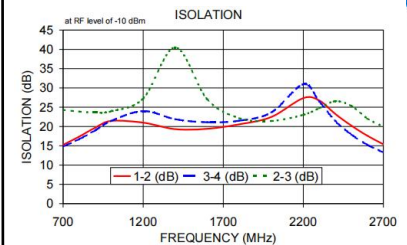
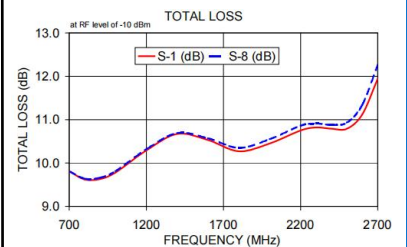
8 Way-0° 50Ω 700 to 2500 MHz

## Maximum Ratings

|                                                                 |                |
|-----------------------------------------------------------------|----------------|
| Operating Temperature                                           | -40°C to 85°C  |
| Storage Temperature                                             | -55°C to 100°C |
| Power Input (as a splitter)                                     | 5W max.        |
| Internal Dissipation                                            | 0.5W max.      |
| Permanent damage may occur if any of these limits are exceeded. |                |

## Pad Connections

|          |            |
|----------|------------|
| SUM PORT | 18         |
| PORT 1   | 1          |
| PORT 2   | 3          |
| PORT 3   | 4          |
| PORT 4   | 6          |
| PORT 5   | 7          |
| PORT 6   | 9          |
| PORT 7   | 10         |
| PORT 8   | 12         |
| GROUND   | all others |



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