# Power Splitter/Combiner

## JY-SCPS-4-62+

**4 Way-0° 50Ω 1 to 650 MHz**

### Features
- wideband, 1 to 650 MHz,
- excellent phase unbalance
- good isolation, 26 dB typ.
- excellent amplitude unbalance, 0.3 dB typ.
- excellent matching VSWR, 1.2:1 typ.
- rugged, shielded case

### Applications
- communication systems
- instrumentation
- cellular, GPS, PCS
- VHF/UHF/receivers/transmitters

### electrical schematic

### Electrical Specifications at 25°C

| Parameter | Frequency(MHz) | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|
| Frequency Range | | 1 | - | 650 | MHz |
| Insertion Loss Above 6.0 dB | 1-280<br>280-600<br>600-650 | - | 0.6<br>1.0<br>1.4 | 0.9<br>1.5<br>1.8 | dB |
| Isolation | 1-280<br>280-600<br>600-650 | 21<br>21<br>18 | 30<br>26<br>24 | - | dB |
| Phase Unbalance | 1-280<br>280-600<br>600-650 | - | 1<br>2<br>3 | 3<br>4<br>6 | Degree |
| Amplitude Unbalance | 1-280<br>280-600<br>600-650 | - | 0.1<br>0.3<br>0.4 | 0.2<br>0.5<br>0.7 | dB |
| VSWR (Port S) | 1-280<br>280-600<br>600-650 | - | 1.2<br>1.2<br>1.4 | 1.3<br>1.37<br>1.65 | :1 |
| VSWR (Port 1-4) | 1-280<br>280-600<br>600-650 | - | 1.2<br>1.1<br>1.15 | 1.3<br>1.28<br>1.3 | :1 |

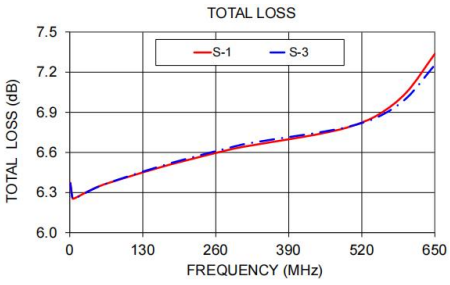
### Maximum Ratings

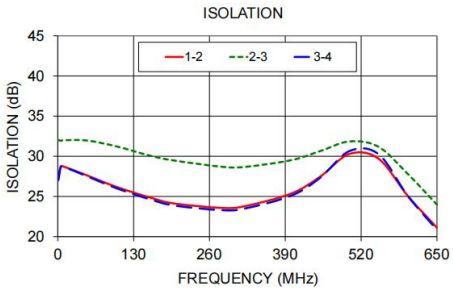
| | |
|---|---|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 1W max. |
| Internal Dissipation | 0.25W max. |

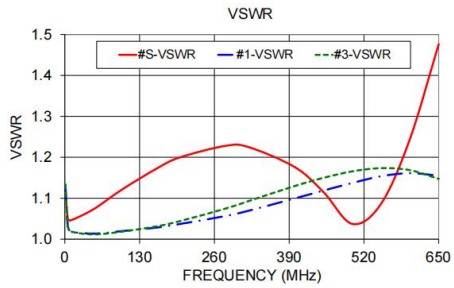
Permanent damage may occur if any of these limits are exceeded.

### Pin Connections

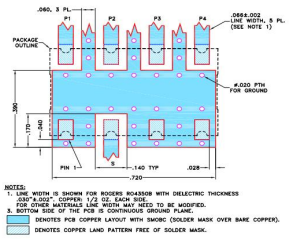
| | |
|---|---|
| SUM PORT | 3 |
| PORT 1 | 2 |
| PORT 2 | 4 |
| PORT 3 | 6 |
| PORT 4 | 8 |
| GROUND | 1,5,7 |



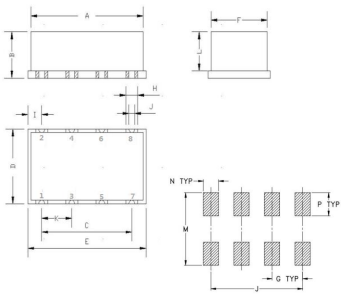




### Suggested PCB Layout



### Outline Drawing



Suggested Layout,
Tolerance to be within ±0.5

### Outline Dimensions：Unit ( mm)

| | | | |
|---|---|---|---|
| A | 19.00 | G | 5.08 |
| B | 6.50 | H | 2.00 |
| C | 15.24 | I | 2.35 |
| D | 10.50 | J | 1.00 |
| E | 20.30 | K | 5.08 |
| F | 9.50 | M | 11.94 |
| N | 2.54 | P | 3.81 |
| L | 5.50 | | |

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