

Surface Mount

Power Splitter/Combiner

JPS-2-1-75+ JPS-2-1-75

2 Way-0° 75Ω 5 to 500 MHz



Maximum Ratings

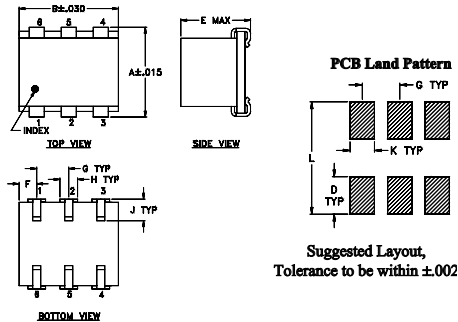
| | |
|-----------------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 1W max. |
| Internal Dissipation | 0.125W max. |

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

Pin Connections

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

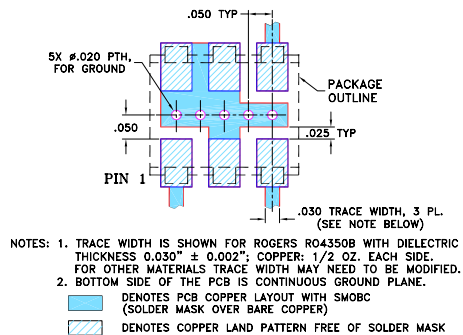
Outline Drawing



Outline Dimensions (inch/mm)

| | A | B | C | D | E | F | G | |
|--|------|------|------|------|-------|------|------|--|
| | .280 | .310 | -- | .100 | .225 | .055 | .100 | |
| | 7.11 | 7.87 | -- | 2.54 | 5.72 | 1.40 | 2.54 | |
| | H | J | K | L | wt | | | |
| | .047 | .065 | .065 | .300 | grams | | | |
| | 1.19 | 1.65 | 1.65 | 7.62 | 0.45 | | | |

Demo Board MCL P/N: TB-169 Suggested PCB Layout (PL-054)



Features

- low insertion, 0.15 dB typ.
- excellent insertion loss flatness, 0.2 dB peak to peak
- excellent amplitude unbalance, 0.05 dB typ.
- very good phase unbalance, 0.1 deg. typ.
- excellent VSWR 1.1:1 typ. all ports.
- J-leads for excellent solderability and strain relief

Applications

- cable tv
- UHF transmitters/receivers

CASE STYLE: BH292
PRICE: \$9.95 ea. QTY. (1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

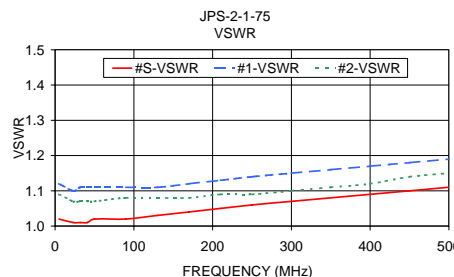
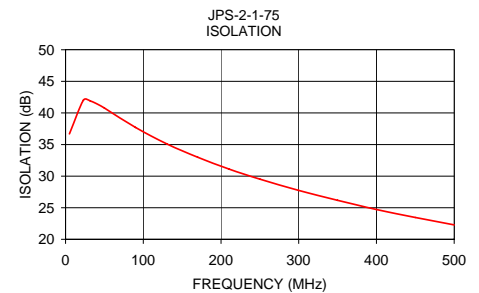
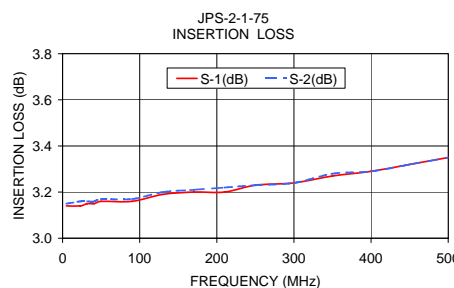
Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) | | | | | | INSERTION LOSS (dB) ABOVE 3.0 dB | | | | | | PHASE UNBALANCE (Degrees) | | | AMPLITUDE UNBALANCE (dB) | | |
|--------------------------------|----------------|-----|------|-----|------|-----|----------------------------------|------|------|------|------|------|---------------------------|------|------|--------------------------|------|------|
| | L | | M | | U | | L | | M | | U | | L | M | U | L | M | U |
| | Typ. | Min | Typ. | Min | Typ. | Min | Typ. | Max. | Typ. | Max. | Typ. | Max. | Max. | Max. | Max. | Max. | Max. | Max. |
| f _c -f _u | | | | | | | | | | | | | | | | | | |
| 5-500 | 25 | 18 | 35 | 20 | 20 | 18 | 0.15 | 0.5 | 0.15 | 0.7 | 0.25 | 0.7 | 1.0 | 2.0 | 3.0 | 0.1 | 0.2 | 0.4 |

L = 5-50 MHz M = 50-250 MHz U = 250-500 MHz

Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) | | Amplitude Unbalance (dB) | Isolation (dB) | Phase Unbalance (deg.) | VSWR S | VSWR 1 | VSWR 2 |
|-----------------|---------------------|------|--------------------------|----------------|------------------------|--------|--------|--------|
| | S-1 | S-2 | | | | | | |
| 5.00 | 3.14 | 3.15 | 0.01 | 36.69 | 0.04 | 1.02 | 1.12 | 1.09 |
| 23.00 | 3.14 | 3.16 | 0.02 | 42.03 | 0.06 | 1.01 | 1.10 | 1.07 |
| 32.00 | 3.15 | 3.16 | 0.01 | 41.88 | 0.08 | 1.01 | 1.11 | 1.07 |
| 41.00 | 3.15 | 3.16 | 0.01 | 41.39 | 0.01 | 1.01 | 1.11 | 1.07 |
| 50.00 | 3.16 | 3.17 | 0.01 | 40.78 | 0.01 | 1.02 | 1.11 | 1.07 |
| 90.00 | 3.16 | 3.17 | 0.01 | 37.71 | 0.06 | 1.02 | 1.11 | 1.08 |
| 130.00 | 3.19 | 3.20 | 0.01 | 35.12 | 0.08 | 1.03 | 1.11 | 1.08 |
| 170.00 | 3.20 | 3.21 | 0.01 | 32.99 | 0.18 | 1.04 | 1.12 | 1.08 |
| 210.00 | 3.20 | 3.22 | 0.02 | 31.13 | 0.07 | 1.05 | 1.13 | 1.09 |
| 250.00 | 3.23 | 3.23 | 0.01 | 29.52 | 0.21 | 1.06 | 1.14 | 1.09 |
| 300.00 | 3.24 | 3.24 | 0.01 | 27.74 | 0.20 | 1.07 | 1.15 | 1.10 |
| 350.00 | 3.27 | 3.28 | 0.01 | 26.17 | 0.20 | 1.08 | 1.16 | 1.11 |
| 400.00 | 3.29 | 3.29 | 0.00 | 24.72 | 0.19 | 1.09 | 1.17 | 1.12 |
| 450.00 | 3.32 | 3.32 | 0.00 | 23.46 | 0.12 | 1.10 | 1.18 | 1.14 |
| 500.00 | 3.35 | 3.35 | 0.00 | 22.28 | 0.17 | 1.11 | 1.19 | 1.15 |



electrical schematic



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