



THE DATASHEET OF JPS-2-4+



Power Splitter/Combiner

JPS-2-4+

2 Way-0° 50Ω 100 to 1000 MHz

Maximum Ratings

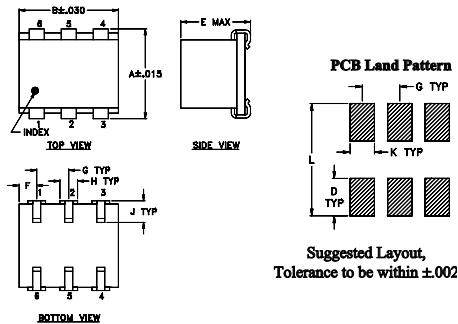
| | |
|-----------------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 1W max. |
| Internal Dissipation | 0.125W max. |

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

Pin Connections

| | |
|----------|-----|
| SUMPORT | 1 |
| PORT 1 | 3 |
| PORT 2 | 4 |
| GROUND | 6 |
| NOT USED | 2,5 |

Outline Drawing

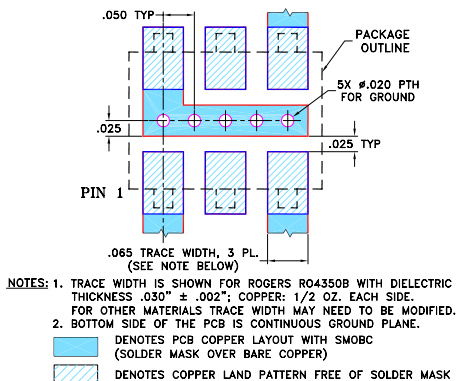


Outline Dimensions (inch/mm)

| 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-48+ Suggested PCB Layout (PL-035)



- NOTES:
- TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - 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

Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuit's standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp

Features

- wide bandwidth 100-1000 MHz
- low insertion loss, 0.5 dB typ.
- good isolation, 22 dB typ.
- excellent VSWR
- J-leads for excellent solderability and strain relief

Applications

- VHF/UHF
- cellular
- instrumentation



Generic photo used for illustration purposes only

CASE STYLE: BH292

+RoHS Compliant

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

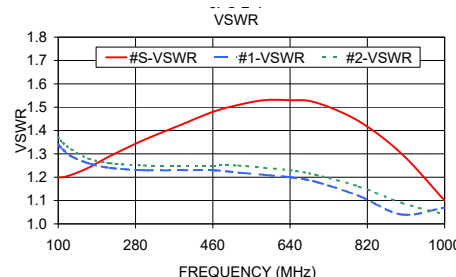
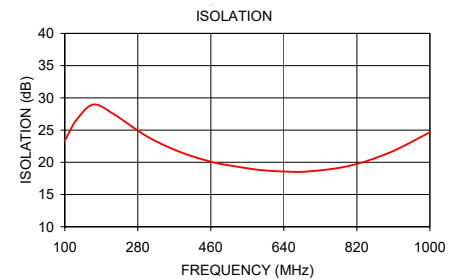
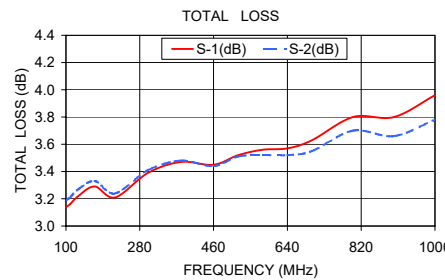
Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) | | INSERTION LOSS (dB) ABOVE 3.0 dB | | PHASE UNBALANCE (Degrees) | AMPLITUDE UNBALANCE (dB) |
|-------------------|----------------|-----|----------------------------------|------|---------------------------|--------------------------|
| | Typ. | Min | Typ. | Max. | Max. | Max. |
| $f_c - f_u$ | | | | | | |
| 100-1000 | 22 | 16 | 0.5 | 1.4 | 5.0 | 0.4 |

Typical Performance Data

| Frequency (MHz) | Total Loss ¹ (dB) | | Amplitude Unbalance (dB) | Isolation (dB) | Phase Unbalance (deg.) | VSWR S | VSWR 1 | VSWR 2 |
|-----------------|------------------------------|------|--------------------------|----------------|------------------------|--------|--------|--------|
| | S-1 | S-2 | | | | | | |
| 100.00 | 3.14 | 3.19 | 0.06 | 23.36 | 0.47 | 1.20 | 1.34 | 1.37 |
| 110.00 | 3.16 | 3.21 | 0.05 | 24.54 | 0.35 | 1.20 | 1.32 | 1.35 |
| 130.00 | 3.22 | 3.27 | 0.05 | 26.69 | 0.32 | 1.21 | 1.29 | 1.32 |
| 170.00 | 3.29 | 3.33 | 0.05 | 28.97 | 0.20 | 1.24 | 1.26 | 1.28 |
| 220.00 | 3.21 | 3.24 | 0.03 | 27.50 | 0.09 | 1.29 | 1.24 | 1.26 |
| 300.00 | 3.39 | 3.41 | 0.03 | 24.11 | 0.05 | 1.36 | 1.23 | 1.25 |
| 380.00 | 3.47 | 3.48 | 0.01 | 21.70 | 0.08 | 1.42 | 1.23 | 1.25 |
| 460.00 | 3.45 | 3.44 | 0.01 | 20.09 | 0.11 | 1.48 | 1.23 | 1.25 |
| 520.00 | 3.52 | 3.51 | 0.02 | 19.37 | 0.09 | 1.51 | 1.22 | 1.25 |
| 580.00 | 3.56 | 3.52 | 0.04 | 18.82 | 0.09 | 1.53 | 1.21 | 1.24 |
| 640.00 | 3.57 | 3.52 | 0.05 | 18.57 | 0.05 | 1.53 | 1.20 | 1.23 |
| 700.00 | 3.63 | 3.55 | 0.08 | 18.59 | 0.00 | 1.52 | 1.18 | 1.21 |
| 800.00 | 3.80 | 3.70 | 0.10 | 19.43 | 0.31 | 1.44 | 1.12 | 1.16 |
| 900.00 | 3.80 | 3.66 | 0.15 | 21.49 | 0.55 | 1.30 | 1.04 | 1.09 |
| 1000.00 | 3.96 | 3.78 | 0.18 | 24.65 | 1.08 | 1.10 | 1.07 | 1.04 |

1. Total Loss = Insertion Loss + 3dB splitter loss.





electrical schematic



Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View JPS-2-4+ on WIN SOURCE](#)
-  [Mini-Circuits Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management