

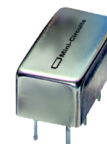
Plug-In

Power Splitter/Combiner

3 Way-0° 50Ω

5 to 500 MHz

PSC-3-1W+
PSC-3-1W



CASE STYLE: A01

PRICE: \$40.20 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.

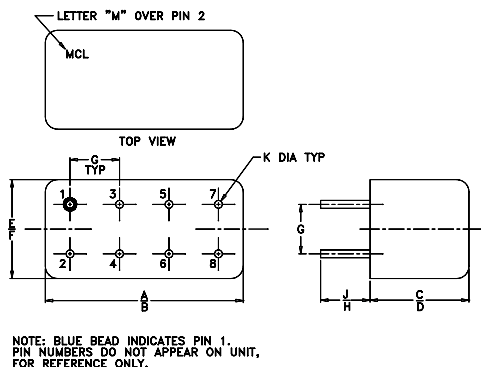
Maximum Ratings

| | |
|-----------------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 1W max. |
| Internal Dissipation | 0.375W max. |

Pin Connections

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

Outline Drawing



Outline Dimensions (inch/mm)

| A | B | C | D | E | F |
|-------|-------|------|-------|-------|-------|
| .770 | .800 | .385 | .400 | .370 | .400 |
| 19.56 | 20.32 | 9.78 | 10.16 | 9.40 | 10.16 |
| G | H | J | K | wt | |
| .200 | .20 | .14 | .031 | grams | |
| 5.08 | 5.08 | 3.56 | 0.79 | | 5.2 |

Features

- wideband, 5 to 500 MHz
- low insertion loss, 0.4 dB typ.
- good isolation, 31 dB typ.
- rugged welded construction

Applications

- VHF/UHF
- communication systems

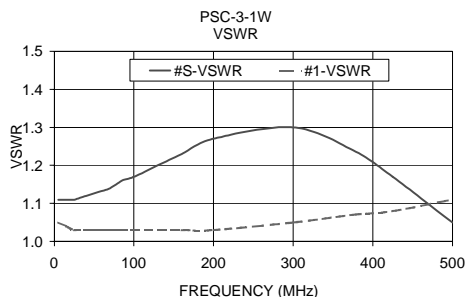
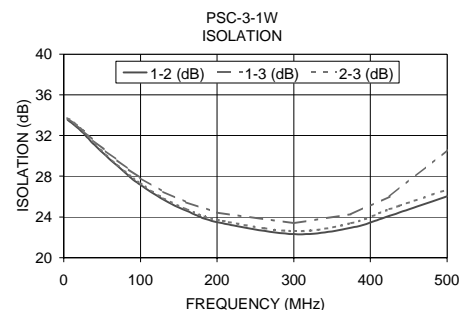
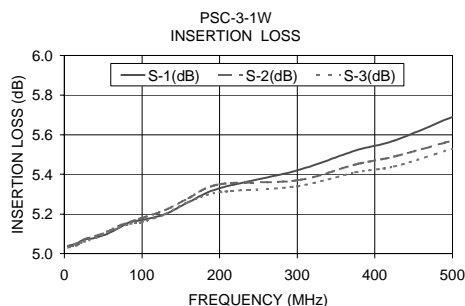
Splitter Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) | | | | | | INSERTION LOSS (dB) ABOVE 4.8 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 _L -f _U | Typ. | Min. | Typ. | Min. | Typ. | Min. | Typ. | Max. | Typ. | Max. | Typ. | Max. | Max. | Max. | Max. | Max. | Max. | Max. |
| 5-500 | 25 | 20 | 31 | 15 | 25 | 15 | 0.4 | 0.8 | 0.4 | 1.4 | 0.8 | 1.4 | 2 | 3 | 5 | 0.1 | 0.3 | 0.6 |

L = low range [f_L to 10 f_L] M = mid range [10 f_L to $f_U/2$] U = upper range [$f_U/2$ to f_U]

Typical Performance Data

| Freq. (MHz) | Insertion Loss (dB) | | | Amp. Unbal. (dB) | Isolation (dB) | | | Phase Unbal. (deg.) | VSWR S | VSWR 1 | VSWR 2 | VSWR 3 |
|----------------|------------------------|------|------|------------------------|-------------------|-------|-------|---------------------------|-----------|-----------|-----------|-----------|
| | S-1 | S-2 | S-3 | | 1-2 | 1-3 | 2-3 | | | | | |
| 5.00 | 5.04 | 5.04 | 5.03 | 0.01 | 33.54 | 33.69 | 33.71 | 0.04 | 1.11 | 1.05 | 1.05 | 1.05 |
| 15.00 | 5.05 | 5.04 | 5.05 | 0.01 | 32.96 | 33.10 | 33.16 | 0.09 | 1.11 | 1.04 | 1.04 | 1.04 |
| 25.00 | 5.07 | 5.07 | 5.06 | 0.01 | 32.27 | 32.48 | 32.49 | 0.14 | 1.11 | 1.03 | 1.03 | 1.03 |
| 40.00 | 5.08 | 5.09 | 5.08 | 0.01 | 31.09 | 31.45 | 31.26 | 0.26 | 1.12 | 1.03 | 1.03 | 1.03 |
| 55.00 | 5.10 | 5.11 | 5.11 | 0.01 | 30.01 | 30.47 | 30.15 | 0.27 | 1.13 | 1.03 | 1.03 | 1.03 |
| 70.00 | 5.13 | 5.14 | 5.13 | 0.01 | 29.01 | 29.58 | 29.14 | 0.40 | 1.14 | 1.03 | 1.03 | 1.03 |
| 85.00 | 5.16 | 5.16 | 5.15 | 0.01 | 28.01 | 28.66 | 28.14 | 0.54 | 1.16 | 1.03 | 1.03 | 1.03 |
| 100.00 | 5.17 | 5.18 | 5.16 | 0.01 | 27.15 | 27.83 | 27.31 | 0.50 | 1.17 | 1.03 | 1.02 | 1.02 |
| 130.00 | 5.20 | 5.22 | 5.20 | 0.02 | 25.71 | 26.47 | 25.85 | 0.65 | 1.20 | 1.03 | 1.02 | 1.02 |
| 160.00 | 5.26 | 5.28 | 5.26 | 0.02 | 24.61 | 25.45 | 24.77 | 0.87 | 1.23 | 1.03 | 1.02 | 1.02 |
| 200.00 | 5.33 | 5.35 | 5.31 | 0.03 | 23.50 | 24.43 | 23.72 | 0.88 | 1.27 | 1.03 | 1.02 | 1.02 |
| 300.00 | 5.42 | 5.37 | 5.34 | 0.08 | 22.32 | 23.39 | 22.61 | 1.41 | 1.30 | 1.05 | 1.05 | 1.06 |
| 375.00 | 5.52 | 5.45 | 5.41 | 0.11 | 22.95 | 24.29 | 23.40 | 1.69 | 1.24 | 1.07 | 1.08 | 1.09 |
| 425.00 | 5.57 | 5.49 | 5.44 | 0.12 | 24.12 | 26.01 | 24.77 | 1.87 | 1.17 | 1.08 | 1.11 | 1.11 |
| 500.00 | 5.69 | 5.57 | 5.53 | 0.16 | 26.04 | 30.58 | 26.69 | 2.05 | 1.05 | 1.11 | 1.14 | 1.14 |



electrical schematic



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