

Plug-In

Power Splitter/Combiner

PSC-4-1W+

4 Way-0° 50Ω 1 to 500 MHz



Generic photo used for illustration purposes only

CASE STYLE: A01

+RoHS Compliant

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

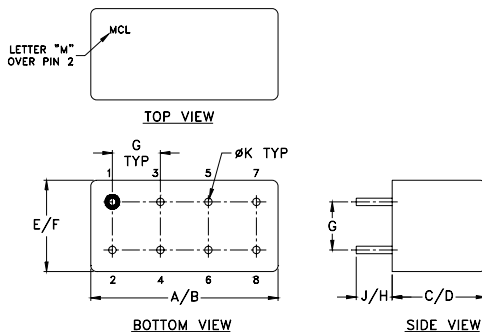
Maximum Ratings

| | |
|---|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 0.5W max. |
| Internal Dissipation | 0.250W max. |
| Permanent damage may occur if any of these limits are exceeded. | |

Pin Connections

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

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

- low insertion loss, 0.5 dB typ.
- good isolation, 27 dB typ.
- rugged welded construction

Applications

- UHF/VHF
- defense and federal communication

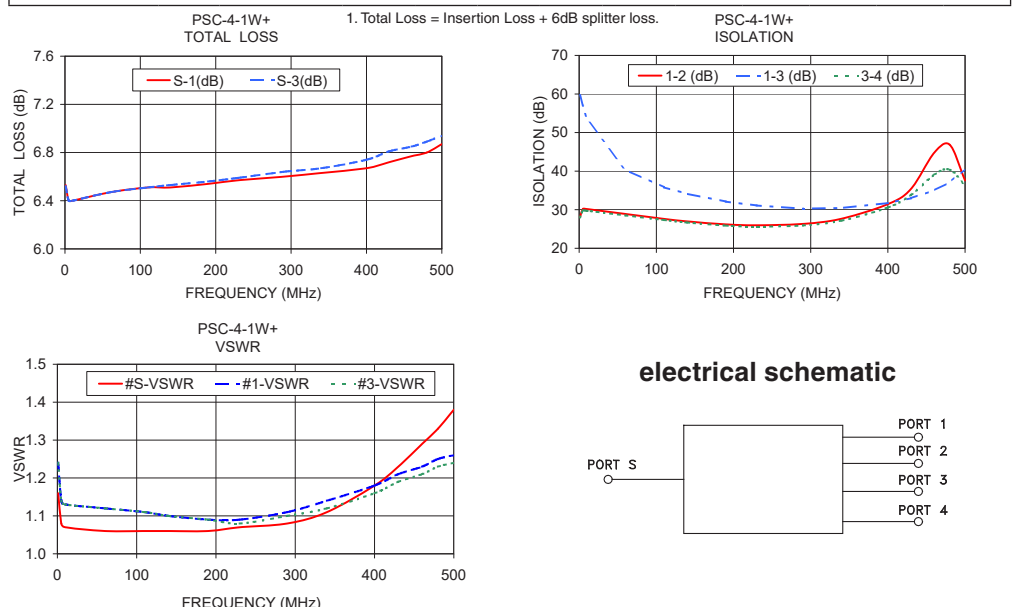
Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) | | | | | | INSERTION LOSS (dB) ABOVE 6.0 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_L - f_U | 29 | 20 | 27 | 18 | 25 | 18 | 0.4 | 0.8 | 0.5 | 1.0 | 0.8 | 1.5 | 1 | 3 | 5 | 0.2 | 0.3 | 0.5 |

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) | Total Loss ¹ (dB) | | | | Amp. Unbal. (dB) | Isolation (dB) | | | Phase Unbal. (deg.) | VSWR S | VSWR 1 | VSWR 2 | VSWR 3 | VSWR 4 |
|-------------|------------------------------|------|------|------|------------------|----------------|-------|-------|---------------------|--------|--------|--------|--------|--------|
| | S-1 | S-2 | S-3 | S-4 | | 1-2 | 1-3 | 3-4 | | | | | | |
| 1.00 | 6.53 | 6.53 | 6.52 | 6.52 | 0.01 | 28.07 | 59.70 | 27.99 | 0.11 | 1.16 | 1.24 | 1.24 | 1.24 | 1.24 |
| 5.00 | 6.40 | 6.40 | 6.40 | 6.40 | 0.01 | 30.23 | 56.95 | 29.79 | 0.04 | 1.08 | 1.14 | 1.14 | 1.14 | 1.14 |
| 10.00 | 6.40 | 6.40 | 6.40 | 6.40 | 0.01 | 30.18 | 53.42 | 29.74 | 0.05 | 1.07 | 1.13 | 1.13 | 1.13 | 1.14 |
| 60.00 | 6.47 | 6.47 | 6.47 | 6.48 | 0.01 | 28.89 | 40.36 | 28.52 | 0.32 | 1.06 | 1.12 | 1.12 | 1.12 | 1.12 |
| 110.00 | 6.51 | 6.51 | 6.51 | 6.52 | 0.01 | 27.62 | 35.81 | 27.33 | 0.59 | 1.06 | 1.11 | 1.11 | 1.11 | 1.11 |
| 140.00 | 6.51 | 6.53 | 6.53 | 6.55 | 0.03 | 26.97 | 34.13 | 26.68 | 0.74 | 1.06 | 1.10 | 1.10 | 1.10 | 1.10 |
| 190.00 | 6.54 | 6.55 | 6.56 | 6.60 | 0.05 | 26.20 | 32.10 | 25.89 | 0.83 | 1.06 | 1.09 | 1.09 | 1.09 | 1.09 |
| 230.00 | 6.57 | 6.58 | 6.59 | 6.63 | 0.06 | 25.97 | 31.10 | 25.61 | 0.97 | 1.07 | 1.09 | 1.08 | 1.08 | 1.09 |
| 290.00 | 6.60 | 6.60 | 6.64 | 6.69 | 0.10 | 26.33 | 30.29 | 25.93 | 1.12 | 1.08 | 1.11 | 1.09 | 1.10 | 1.09 |
| 340.00 | 6.63 | 6.63 | 6.67 | 6.76 | 0.13 | 27.67 | 30.45 | 27.18 | 1.12 | 1.11 | 1.14 | 1.12 | 1.12 | 1.12 |
| 400.00 | 6.67 | 6.70 | 6.74 | 6.86 | 0.18 | 31.45 | 31.73 | 30.57 | 1.07 | 1.18 | 1.18 | 1.16 | 1.16 | 1.15 |
| 430.00 | 6.72 | 6.77 | 6.81 | 6.92 | 0.19 | 35.41 | 32.98 | 33.83 | 1.04 | 1.23 | 1.21 | 1.18 | 1.19 | 1.18 |
| 460.00 | 6.77 | 6.82 | 6.85 | 6.98 | 0.21 | 44.77 | 35.04 | 39.06 | 0.88 | 1.29 | 1.23 | 1.21 | 1.21 | 1.20 |
| 480.00 | 6.80 | 6.84 | 6.89 | 7.02 | 0.22 | 46.86 | 37.10 | 40.39 | 0.77 | 1.33 | 1.25 | 1.22 | 1.23 | 1.22 |
| 500.00 | 6.87 | 6.91 | 6.94 | 7.09 | 0.22 | 37.58 | 40.54 | 36.30 | 0.82 | 1.38 | 1.26 | 1.24 | 1.24 | 1.23 |



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.
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