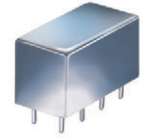


Plug-In

# Power Splitter/Combiner

3 Way-0° 50Ω 1 to 200 MHz

PSC-3-13+  
PSC-3-13



CASE STYLE: A01

PRICE: \$34.20 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.    |
| Permanent damage may occur if any of these limits are exceeded. |                |

## Pin Connections

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

## Features

- low insertion loss, 0.35 dB typ.
- high isolation, 45 dB typ.
- rugged welded construction

## Applications

- HF/VHF
- amateur radio
- federal & defense communication

## Electrical Specifications

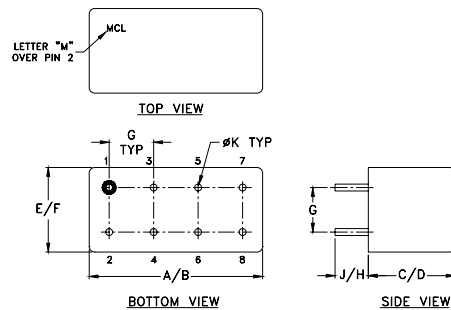
| FREQ.<br>RANGE<br>(MHz) | ISOLATION<br>(dB) |      |      |      |      |      | INSERTION LOSS (dB)<br>ABOVE 4.8 dB |      |      |      |      |      | PHASE<br>UNBALANCE<br>(Degrees) |      |      | AMPLITUDE<br>UNBALANCE<br>(dB) |      |      |
|-------------------------|-------------------|------|------|------|------|------|-------------------------------------|------|------|------|------|------|---------------------------------|------|------|--------------------------------|------|------|
|                         | L                 |      | M    |      | U    |      | L                                   |      | M    |      | U    |      | L                               |      | M    |                                | U    |      |
| $f_L$ - $f_U$           | Typ.              | Min. | Typ. | Min. | Typ. | Min. | Typ.                                | Max. | Typ. | Max. | Typ. | Max. | Max.                            | Max. | Max. | Max.                           | Max. | Max. |
| 1-200                   | 45                | 35   | 45   | 30   | 37   | 30   | 0.25                                | 0.5  | 0.35 | 0.6  | 0.35 | 0.8  | 1                               | 3    | 4    | 0.1                            | 0.2  | 0.2  |

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

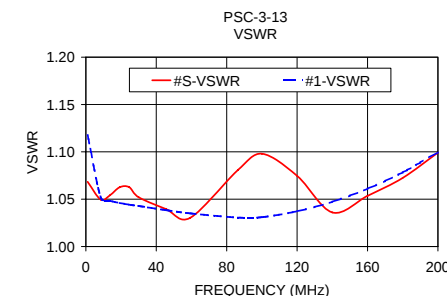
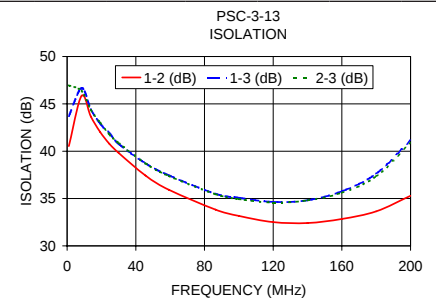
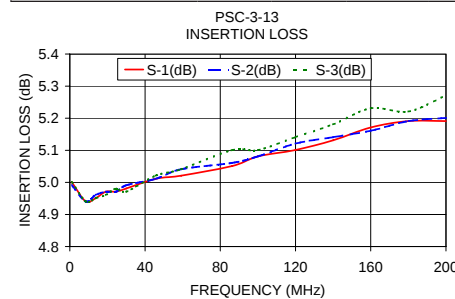
| Freq.<br>(MHz) | Insertion Loss<br>(dB) |      |      | Amp.<br>Unbal.<br>(dB) | Isolation<br>(dB) |       |       | Phase<br>Unbal.<br>(deg.) | VSWR<br>S | VSWR<br>1 | VSWR<br>2 | VSWR<br>3 |
|----------------|------------------------|------|------|------------------------|-------------------|-------|-------|---------------------------|-----------|-----------|-----------|-----------|
|                | S-1                    | S-2  | S-3  |                        | 1-2               | 1-3   | 2-3   |                           |           |           |           |           |
| 1.00           | 5.00                   | 4.99 | 5.00 | 0.01                   | 40.54             | 43.71 | 46.96 | 0.06                      | 1.07      | 1.12      | 1.11      | 1.10      |
| 8.40           | 4.94                   | 4.94 | 4.94 | 0.01                   | 45.84             | 46.65 | 46.37 | 0.16                      | 1.05      | 1.05      | 1.05      | 1.05      |
| 13.80          | 4.95                   | 4.96 | 4.95 | 0.01                   | 43.67             | 44.42 | 44.35 | 0.12                      | 1.05      | 1.05      | 1.04      | 1.04      |
| 19.20          | 4.97                   | 4.97 | 4.96 | 0.01                   | 42.04             | 42.91 | 43.02 | 0.07                      | 1.06      | 1.05      | 1.04      | 1.04      |
| 24.60          | 4.97                   | 4.97 | 4.98 | 0.01                   | 40.78             | 41.92 | 41.75 | 0.18                      | 1.06      | 1.04      | 1.04      | 1.04      |
| 30.00          | 4.98                   | 4.99 | 4.97 | 0.02                   | 39.82             | 40.78 | 40.89 | 0.32                      | 1.05      | 1.04      | 1.04      | 1.04      |
| 45.60          | 5.01                   | 5.01 | 5.02 | 0.01                   | 37.43             | 38.73 | 38.71 | 0.38                      | 1.04      | 1.04      | 1.03      | 1.03      |
| 59.20          | 5.02                   | 5.04 | 5.04 | 0.02                   | 35.93             | 37.46 | 37.38 | 0.29                      | 1.03      | 1.04      | 1.03      | 1.03      |
| 86.40          | 5.05                   | 5.06 | 5.10 | 0.05                   | 33.83             | 35.51 | 35.47 | 0.47                      | 1.08      | 1.03      | 1.02      | 1.03      |
| 100.00         | 5.08                   | 5.08 | 5.10 | 0.01                   | 33.17             | 35.08 | 34.94 | 0.82                      | 1.10      | 1.03      | 1.02      | 1.03      |
| 120.00         | 5.10                   | 5.12 | 5.14 | 0.04                   | 32.51             | 34.64 | 34.57 | 0.69                      | 1.07      | 1.04      | 1.02      | 1.04      |
| 140.00         | 5.13                   | 5.14 | 5.18 | 0.05                   | 32.41             | 34.82 | 34.81 | 0.99                      | 1.04      | 1.05      | 1.03      | 1.05      |
| 160.00         | 5.17                   | 5.16 | 5.23 | 0.07                   | 32.84             | 35.77 | 35.61 | 0.77                      | 1.05      | 1.06      | 1.05      | 1.07      |
| 180.00         | 5.19                   | 5.19 | 5.22 | 0.03                   | 33.65             | 37.63 | 37.35 | 1.06                      | 1.07      | 1.08      | 1.06      | 1.09      |
| 200.00         | 5.19                   | 5.20 | 5.27 | 0.07                   | 35.29             | 41.15 | 40.89 | 0.99                      | 1.10      | 1.10      | 1.08      | 1.11      |

## Outline Drawing

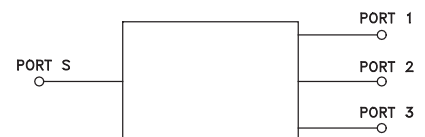


## Outline Dimensions (inch mm)

| 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   |



## electrical schematic



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