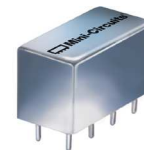


# Plug-In Power Splitter/Combiner

## PSCQ-2-180+ PSCQ-2-180

2 Way-90° 50Ω 120 to 180 MHz



CASE STYLE: A01  
PRICE: \$29.20 ea. QTY. (1-9)

**+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)                                     | 1W max.        |
| Permanent damage may occur if any of these limits are exceeded. |                |

### Pin Connections

|                      |         |
|----------------------|---------|
| SUM PORT             | 1       |
| PORT 1 (+90°)        | 2       |
| PORT 2 (0°)          | 5       |
| GROUND               | 3,4,7,8 |
| CASE GROUND          | 3,4,7,8 |
| 50 OHM TERM EXTERNAL | 6       |

### Features

- low insertion loss, 0.4 dB typ.
- excellent isolation, 30 dB typ.
- excellent VSWR, 1.10:1 typ.
- rugged shielded case

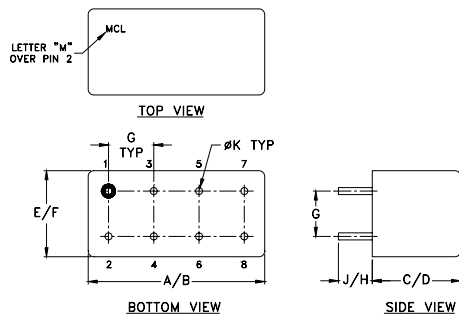
### Applications

- modulators
- balanced amplifiers

### Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) | INSERTION LOSS (dB)<br>Avg. of Coupled Outputs ABOVE 3 dB | PHASE UNBALANCE (Degrees) | AMPLITUDE UNBALANCE (dB) |
|-------------------|----------------|---|---------------------------|--------------------------|
| $f_L$ - $f_U$     | Typ. Min.      | Typ. Max.   | Max.                      | Max.                     |
| 120-180           | 23 15          | 0.3 0.7   | 4                         | 1.2                      |

### Outline Drawing



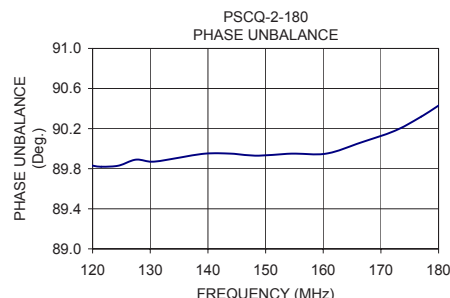
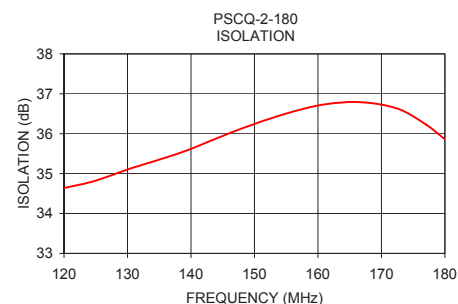
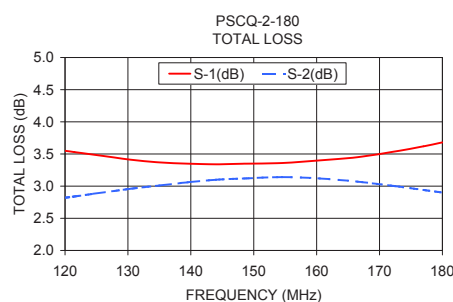
### Outline Dimensions (inch/mm)

| 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   |       |

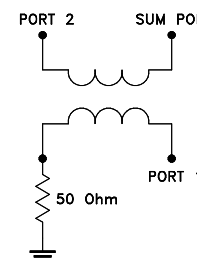
### Typical Performance Data

| Frequency (MHz) | Total Loss <sup>1</sup> (dB) |      | Amplitude Unbalance (dB) | Isolation (dB) | Phase Unbalance (deg.) | VSWR S | VSWR 1 | VSWR 2 |
|-----------------|------------------------------|------|--------------------------|----------------|------------------------|--------|--------|--------|
|                 | S-1                          | S-2  |                          |                |                        |        |        |        |
| 120.00          | 3.55                         | 2.82 | 0.73                     | 34.64          | 89.83                  | 1.04   | 1.05   | 1.04   |
| 121.50          | 3.53                         | 2.84 | 0.69                     | 34.69          | 89.82                  | 1.04   | 1.05   | 1.05   |
| 124.50          | 3.49                         | 2.88 | 0.60                     | 34.80          | 89.83                  | 1.04   | 1.05   | 1.05   |
| 127.50          | 3.45                         | 2.92 | 0.52                     | 34.96          | 89.89                  | 1.04   | 1.06   | 1.05   |
| 130.50          | 3.41                         | 2.96 | 0.46                     | 35.13          | 89.87                  | 1.04   | 1.06   | 1.05   |
| 135.00          | 3.37                         | 3.01 | 0.36                     | 35.35          | 89.91                  | 1.04   | 1.06   | 1.05   |
| 139.50          | 3.35                         | 3.06 | 0.29                     | 35.59          | 89.95                  | 1.04   | 1.06   | 1.05   |
| 144.00          | 3.34                         | 3.10 | 0.24                     | 35.88          | 89.95                  | 1.05   | 1.06   | 1.05   |
| 148.50          | 3.35                         | 3.12 | 0.22                     | 36.16          | 89.93                  | 1.05   | 1.07   | 1.05   |
| 154.50          | 3.36                         | 3.14 | 0.22                     | 36.48          | 89.95                  | 1.05   | 1.07   | 1.06   |
| 160.50          | 3.40                         | 3.12 | 0.28                     | 36.72          | 89.95                  | 1.06   | 1.08   | 1.06   |
| 166.50          | 3.45                         | 3.07 | 0.39                     | 36.79          | 90.06                  | 1.07   | 1.08   | 1.06   |
| 172.50          | 3.54                         | 3.00 | 0.54                     | 36.63          | 90.18                  | 1.08   | 1.09   | 1.07   |
| 177.00          | 3.62                         | 2.94 | 0.68                     | 36.23          | 90.32                  | 1.08   | 1.10   | 1.07   |
| 180.00          | 3.68                         | 2.90 | 0.78                     | 35.86          | 90.43                  | 1.09   | 1.10   | 1.08   |

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



### electrical schematic



For detailed performance specs & shopping online see web site



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

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