

Plug-In

# Power Splitter/Combiner

PSC-4-1-75

4 Way-0° 75Ω

1 to 200 MHz

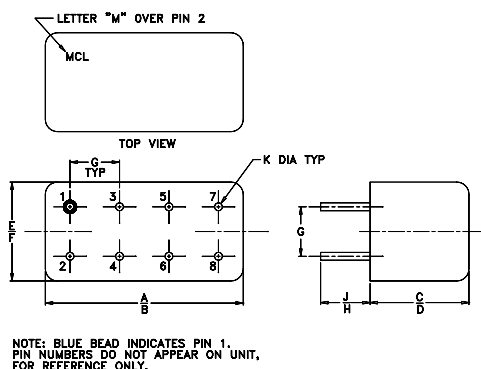
## Maximum Ratings

|                             |                |
|-----------------------------|----------------|
| Operating Temperature       | -55°C to 100°C |
| Storage Temperature         | -55°C to 100°C |
| Power Input (as a splitter) | 1W max.        |
| Internal Dissipation        | 0.250W max.    |

## 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)

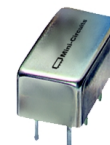
| A     | B     | C    | D     | E     | F     |
|-------|-------|------|-------|-------|-------|
| .770  | .800  | .385 | .400  | .370  | .400  |
| 19.56 | 20.32 | 9.78 | 10.16 | 9.40  | 10.16 |
| G     | H     | J    | K     | wt    |       |
| .200  | .20   | .14  | .031  | grams |       |
| 5.08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

## Features

- low insertion loss, 0.5 dB typ.
- good isolation, 25 dB typ.
- rugged welded construction

## Applications

- HF/VHF
- amateur FM radio
- instrumentation



CASE STYLE: A01

PRICE: \$37.20 ea. QTY (1-9)

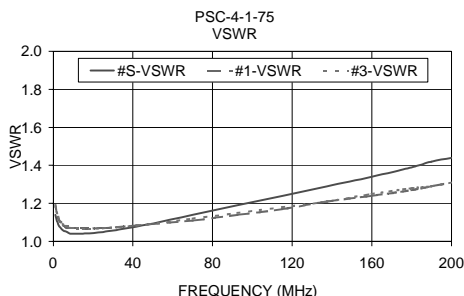
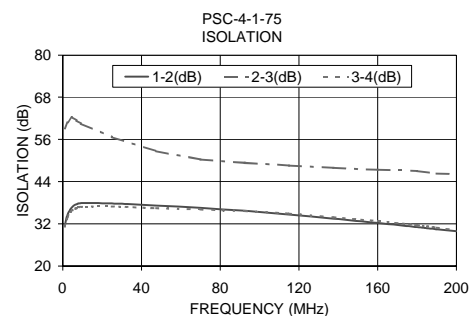
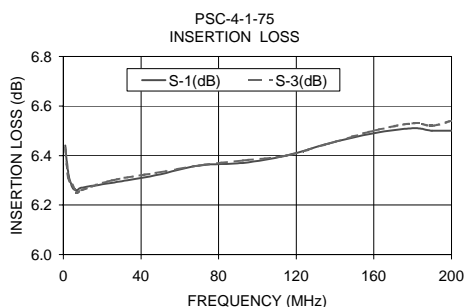
## Splitter Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) |      |      |      |      |      | INSERTION LOSS (dB) ABOVE 6 dB |      |      |      |      |      | PHASE UNBALANCE (Degrees) |      |      | AMPLITUDE UNBALANCE (dB) |      |      |
|-------------------|----------------|------|------|------|------|------|--------------------------------|------|------|------|------|------|---------------------------|------|------|--------------------------|------|------|
|                   | L              | M    | U    | L    | M    | U    | L                              | M    | U    | 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             | 30             | 20   | 25   | 20   | 25   | 20   | 0.4                            | 0.7  | 0.5  | 0.9  | 0.7  | 1.2  | 2                         | 3    | 4    | 0.15                     | 0.2  | 0.3  |

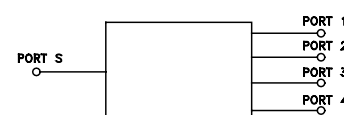
L = low range [ $f_L$  to 10  $f_L$ ] M = mid range [10  $f_L$  to  $f_U/2$ ] U = upper range [ $f_U/2$  to  $f_U$ ]

## Typical Performance Data

| Freq. (MHz) | Insertion Loss (dB) |      |      |      | Amp. Unbal. (dB) | Isolation (dB) |       |       | Phase Unbal. (deg.) | VSWR |      |      |      |      |
|-------------|---------------------|------|------|------|------------------|----------------|-------|-------|---------------------|------|------|------|------|------|
|             | S-1                 | S-2  | S-3  | S-4  |                  | 1-2            | 2-3   | 3-4   |                     | S    | 1    | 2    | 3    | 4    |
| 1.00        | 6.44                | 6.41 | 6.43 | 6.44 | 0.03             | 31.36          | 59.15 | 31.20 | 0.08                | 1.14 | 1.19 | 1.19 | 1.19 | 1.19 |
| 2.50        | 6.33                | 6.33 | 6.31 | 6.32 | 0.02             | 34.59          | 60.84 | 33.86 | 0.26                | 1.09 | 1.12 | 1.13 | 1.13 | 1.13 |
| 4.75        | 6.27                | 6.27 | 6.28 | 6.25 | 0.02             | 36.73          | 62.33 | 35.76 | 0.20                | 1.06 | 1.09 | 1.09 | 1.09 | 1.09 |
| 7.00        | 6.26                | 6.27 | 6.25 | 6.25 | 0.03             | 37.54          | 61.43 | 36.42 | 0.21                | 1.05 | 1.07 | 1.07 | 1.08 | 1.08 |
| 9.25        | 6.27                | 6.26 | 6.26 | 6.26 | 0.01             | 37.87          | 60.47 | 36.81 | 0.10                | 1.04 | 1.07 | 1.07 | 1.07 | 1.07 |
| 25.00       | 6.29                | 6.29 | 6.30 | 6.30 | 0.02             | 37.78          | 56.68 | 36.93 | 0.11                | 1.05 | 1.07 | 1.07 | 1.07 | 1.07 |
| 47.50       | 6.32                | 6.34 | 6.33 | 6.32 | 0.02             | 37.21          | 52.63 | 36.42 | 0.05                | 1.09 | 1.09 | 1.09 | 1.09 | 1.09 |
| 70.00       | 6.36                | 6.38 | 6.36 | 6.36 | 0.02             | 36.50          | 50.29 | 36.05 | 0.27                | 1.14 | 1.11 | 1.12 | 1.12 | 1.12 |
| 92.50       | 6.37                | 6.39 | 6.38 | 6.39 | 0.02             | 35.67          | 49.33 | 35.63 | 0.16                | 1.19 | 1.14 | 1.15 | 1.15 | 1.15 |
| 115.00      | 6.40                | 6.38 | 6.40 | 6.44 | 0.06             | 34.64          | 48.59 | 34.88 | 0.21                | 1.24 | 1.17 | 1.18 | 1.18 | 1.17 |
| 137.50      | 6.45                | 6.45 | 6.45 | 6.46 | 0.02             | 33.45          | 47.89 | 33.82 | 0.34                | 1.29 | 1.21 | 1.21 | 1.21 | 1.21 |
| 160.00      | 6.49                | 6.48 | 6.50 | 6.54 | 0.05             | 32.24          | 47.34 | 32.75 | 0.46                | 1.34 | 1.24 | 1.24 | 1.25 | 1.24 |
| 180.00      | 6.51                | 6.50 | 6.53 | 6.55 | 0.05             | 31.07          | 47.03 | 31.57 | 0.34                | 1.39 | 1.27 | 1.27 | 1.28 | 1.27 |
| 190.00      | 6.50                | 6.49 | 6.52 | 6.56 | 0.06             | 30.44          | 46.30 | 30.88 | 0.27                | 1.42 | 1.29 | 1.29 | 1.29 | 1.29 |
| 200.00      | 6.50                | 6.50 | 6.54 | 6.57 | 0.07             | 29.86          | 46.11 | 30.22 | 0.41                | 1.44 | 1.31 | 1.31 | 1.31 | 1.31 |



## electrical schematic



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