

Coaxial

Power Splitter/Combiner

ZFRSC-2075

2 Way-0° Resistive 75Ω DC to 2000 MHz



Maximum Ratings

| | |
|-----------------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 0.75W max. |
| Internal Dissipation | 0.375W max. |

Coaxial Connections

| | |
|----------|---|
| SUM PORT | 3 |
| PORT 1 | 1 |
| PORT 2 | 2 |

Features

- wideband, DC to 2000 MHz
- low insertion loss, 0.3 dB typ.
- excellent amplitude unbalance, 0.02 dB typ.
- rugged shielded case

Applications

- laboratory
- test set-ups

CASE STYLE: K18

| Connectors | Model | Price | Qty. |
|----------------------|------------|---------|-------|
| BNC | ZFRSC-2075 | \$59.95 | (1-9) |
| BRACKET (OPTION "B") | | \$2.50 | (1+) |

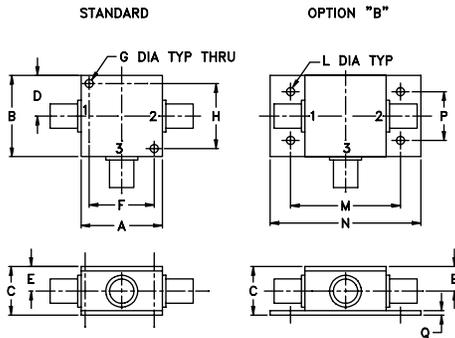
Splitter Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) | | | INSERTION LOSS (dB) ABOVE 3.0 dB | | | | | | PHASE UNBALANCE (Degrees) | | | AMPLITUDE UNBALANCE (dB) | | |
|-------------------|----------------|------|------|----------------------------------|------|------|------|------|------|---------------------------|------|------|--------------------------|------|------|
| | L | M | U | L | | M | | U | | L | M | U | L | M | U |
| f_L - f_U | Typ. | Typ. | Typ. | Typ. | Max. | Typ. | Max. | Typ. | Max. | Max. | Max. | Max. | Max. | Max. | Max. |
| DC-2000 | 6.2 | 6.6 | 7.0 | 0.1 | 0.2 | 0.3 | 0.6 | 0.5 | 1.4 | 1 | 2 | 5 | 0.1 | 0.2 | 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]

This is a resistive power divider to enable frequency coverage from dc to the highest rated frequency. Since resistive power divider do not provide a high degree of isolation (basically isolation equals the insertion loss between ports), an amplifier such as Mini-Circuits' ZFL series is recommended when high isolation is required. Matched power rating 0.75W, internal load dissipation 0.375W.

Outline Drawing



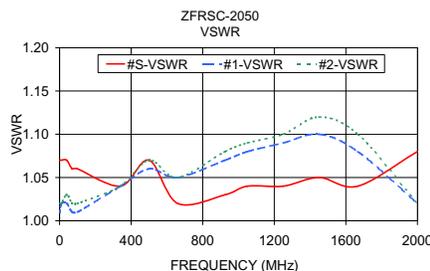
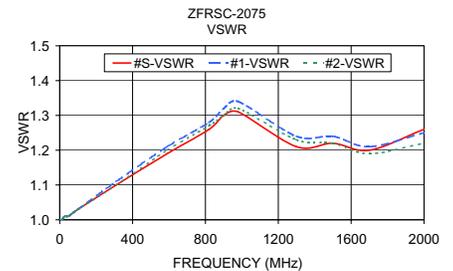
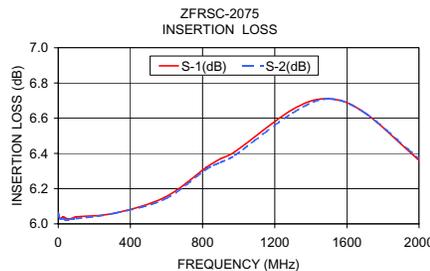
Outline Dimensions (inch/mm)

| A | B | C | D | E | F | G | H |
|-------|-------|-------|-------|------|-------|------|-------|
| 1.25 | 1.25 | .75 | .63 | .38 | 1.00 | .125 | 1.000 |
| 31.75 | 31.75 | 19.05 | 16.00 | 9.65 | 25.40 | 3.18 | 25.40 |

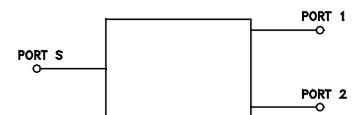
| J | K | L | M | N | P | Q | wt |
|----|----|------|-------|-------|-------|------|-------|
| -- | -- | .125 | 1.688 | 2.18 | .75 | .07 | grams |
| -- | -- | 3.18 | 42.88 | 55.37 | 19.05 | 1.78 | 70.0 |

Typical Performance Data

| Frequency (MHz) | Insertion Loss (dB) | | Amplitude Unbalance (dB) | Isolation (dB) | Phase Unbalance (deg.) | VSWR S | VSWR 1 | VSWR 2 |
|-----------------|---------------------|------|--------------------------|----------------|------------------------|--------|--------|--------|
| | S-1 | S-2 | | | | | | |
| 0.03 | 6.06 | 6.06 | 0.00 | 6.06 | 0.01 | 1.00 | 1.00 | 1.00 |
| 10.00 | 6.03 | 6.03 | 0.00 | 6.03 | 0.01 | 1.00 | 1.00 | 1.00 |
| 28.00 | 6.04 | 6.03 | 0.01 | 6.03 | 0.05 | 1.01 | 1.01 | 1.01 |
| 46.00 | 6.03 | 6.02 | 0.01 | 6.03 | 0.03 | 1.01 | 1.01 | 1.01 |
| 73.00 | 6.03 | 6.03 | 0.00 | 6.03 | 0.03 | 1.02 | 1.02 | 1.02 |
| 100.00 | 6.04 | 6.03 | 0.01 | 6.03 | 0.02 | 1.03 | 1.03 | 1.03 |
| 310.00 | 6.06 | 6.06 | 0.00 | 6.06 | 0.11 | 1.10 | 1.11 | 1.10 |
| 590.00 | 6.15 | 6.14 | 0.01 | 6.15 | 0.14 | 1.19 | 1.21 | 1.20 |
| 820.00 | 6.32 | 6.31 | 0.01 | 6.30 | 0.36 | 1.26 | 1.28 | 1.27 |
| 900.00 | 6.37 | 6.35 | 0.03 | 6.34 | 0.39 | 1.30 | 1.32 | 1.30 |
| 980.00 | 6.41 | 6.39 | 0.01 | 6.37 | 0.46 | 1.31 | 1.34 | 1.32 |
| 1300.00 | 6.65 | 6.63 | 0.01 | 6.62 | 0.53 | 1.21 | 1.24 | 1.23 |
| 1500.00 | 6.71 | 6.71 | 0.01 | 6.73 | 0.70 | 1.22 | 1.24 | 1.22 |
| 1700.00 | 6.63 | 6.63 | 0.00 | 6.70 | 0.71 | 1.20 | 1.21 | 1.19 |
| 2000.00 | 6.36 | 6.37 | 0.01 | 6.48 | 0.65 | 1.26 | 1.25 | 1.22 |



electrical schematic



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