

Coaxial

Power Splitter/Combiner

ZSC-4-1+

4 Way-0° 50Ω 0.1 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. |

Coaxial Connections

| | |
|----------|---|
| SUM PORT | S |
| PORT 1 | 1 |
| PORT 2 | 2 |
| PORT 3 | 3 |
| PORT 4 | 4 |

Features

- wideband, 0.1 to 200 MHz
- high isolation, 30 dB typ.
- excellent output VSWR, 1.1:1 typ.
- rugged shielded case

Applications

- HF/VHF
- radio communication

CASE STYLE: N27

| Connectors | Model | Price | Qty. |
|----------------------|----------|---------|-------|
| BNC | ZSC-4-1+ | \$59.95 | (1-9) |
| BRACKET(OPTION "B") | | \$5.00 | (1+) |
| BRACKET(OPTION "BR") | | \$1.50 | (1+) |

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications

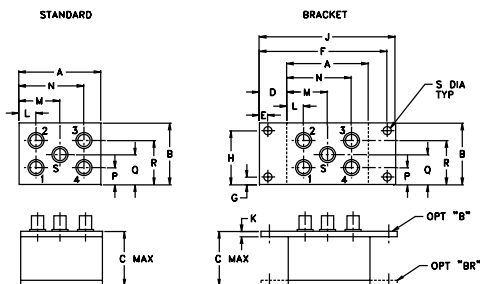
| FREQ. RANGE (MHz) | ISOLATION (dB) | | | | | | INSERTION LOSS (dB) ABOVE 6.0 dB | | | | | | PHASE UNBALANCE (Degrees) | | | AMPLITUDE UNBALANCE (dB) | | |
|-------------------|----------------|------|------|------|------|------|----------------------------------|------|------|------|------|------|---------------------------|------|------|--------------------------|------|------|
| | L | | M | | U | | L | | M | | U | | L | M | U | L | M | U |
| f_L - f_U | Typ. | Min. | Typ. | Min. | Typ. | Min. | Typ. | Max. | Typ. | Max. | Typ. | Max. | Max. | Max. | Max. | Max. | Max. | Max. |
| 0.1-200 | 33 | 20 | 30 | 20 | 27 | 20 | 0.4 | 0.6 | 0.5 | 0.75 | 0.7 | 1.0 | 4 | 6 | 8 | 0.15 | 0.20 | 0.25 |

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 | VSWR 1 | VSWR 2 | VSWR 3 | VSWR 4 |
|-------------|---------------------|------|------|------|------------------|----------------|-------|-------|---------------------|--------|--------|--------|--------|--------|
| | S-1 | S-2 | S-3 | S-4 | | 1-2 | 2-3 | 3-4 | | | | | | |
| 0.10 | 6.19 | 6.18 | 6.15 | 6.15 | 0.04 | 29.23 | 32.04 | 29.48 | 0.63 | 1.26 | 1.38 | 1.38 | 1.36 | 1.35 |
| 0.50 | 6.21 | 6.21 | 6.21 | 6.20 | 0.01 | 29.33 | 44.74 | 29.62 | 0.08 | 1.20 | 1.23 | 1.23 | 1.23 | 1.22 |
| 1.00 | 6.21 | 6.19 | 6.21 | 6.20 | 0.02 | 29.18 | 47.10 | 29.53 | 0.12 | 1.19 | 1.24 | 1.24 | 1.24 | 1.23 |
| 52.00 | 6.29 | 6.30 | 6.30 | 6.30 | 0.01 | 29.38 | 42.51 | 29.07 | 0.39 | 1.22 | 1.18 | 1.17 | 1.18 | 1.17 |
| 100.00 | 6.32 | 6.31 | 6.35 | 6.35 | 0.04 | 28.68 | 39.46 | 27.80 | 0.79 | 1.18 | 1.13 | 1.12 | 1.14 | 1.14 |
| 110.00 | 6.36 | 6.35 | 6.39 | 6.38 | 0.04 | 28.76 | 39.23 | 27.78 | 0.80 | 1.17 | 1.12 | 1.11 | 1.13 | 1.13 |
| 120.00 | 6.39 | 6.37 | 6.43 | 6.42 | 0.06 | 28.89 | 39.08 | 27.76 | 1.04 | 1.16 | 1.11 | 1.10 | 1.12 | 1.12 |
| 130.00 | 6.41 | 6.40 | 6.46 | 6.46 | 0.06 | 29.18 | 39.15 | 27.81 | 1.03 | 1.15 | 1.10 | 1.09 | 1.11 | 1.11 |
| 140.00 | 6.42 | 6.40 | 6.47 | 6.46 | 0.07 | 29.55 | 39.13 | 28.03 | 1.02 | 1.14 | 1.09 | 1.09 | 1.11 | 1.10 |
| 150.00 | 6.41 | 6.40 | 6.46 | 6.46 | 0.07 | 30.07 | 39.41 | 28.28 | 1.23 | 1.12 | 1.09 | 1.08 | 1.10 | 1.10 |
| 160.00 | 6.40 | 6.39 | 6.48 | 6.49 | 0.10 | 30.75 | 39.93 | 28.62 | 1.18 | 1.11 | 1.09 | 1.08 | 1.10 | 1.10 |
| 170.00 | 6.42 | 6.40 | 6.48 | 6.50 | 0.10 | 31.60 | 40.55 | 29.08 | 1.34 | 1.10 | 1.10 | 1.09 | 1.10 | 1.11 |
| 180.00 | 6.46 | 6.44 | 6.55 | 6.55 | 0.11 | 32.71 | 41.60 | 29.58 | 1.24 | 1.09 | 1.10 | 1.10 | 1.11 | 1.11 |
| 190.00 | 6.52 | 6.51 | 6.61 | 6.62 | 0.11 | 34.07 | 43.07 | 30.17 | 1.38 | 1.08 | 1.11 | 1.11 | 1.11 | 1.11 |
| 200.00 | 6.54 | 6.53 | 6.62 | 6.65 | 0.13 | 35.66 | 44.95 | 30.69 | 1.62 | 1.09 | 1.12 | 1.12 | 1.12 | 1.12 |

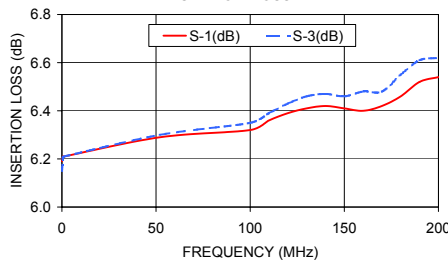
Outline Drawing



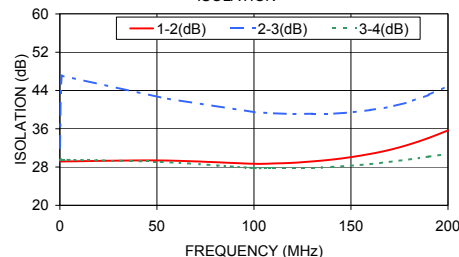
Outline Dimensions (inch/mm)

| A | B | C | D | E | F | G | H | J |
|-------|-------|-------|-------|------|-------|-------|-------|-------|
| 2.25 | 1.38 | 1.24 | .50 | .150 | 3.100 | .138 | 1.238 | 3.25 |
| 57.15 | 35.05 | 31.50 | 12.70 | 3.81 | 78.74 | 3.51 | 31.45 | 82.55 |
| K | L | M | N | P | Q | R | S | wt |
| .10 | .48 | 1.13 | 1.78 | .36 | .69 | 1.01 | .150 | grams |
| 2.54 | 12.19 | 28.70 | 45.21 | 9.14 | 17.53 | 25.65 | 3.81 | 92.0 |

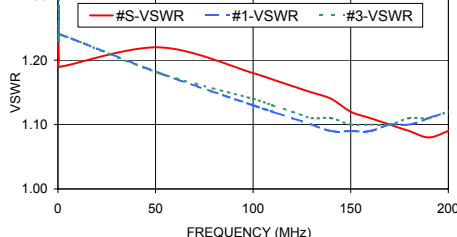
ZSC-4-1+ INSERTION LOSS



ZSC-4-1+ ISOLATION



ZSC-4-1+ VSWR



electrical schematic



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