

Coaxial

Power Splitter/Combiner

ZSCJ-2-1+

2 Way-180° 50Ω 1 to 200 MHz



CASE STYLE: M22

Connectors Model
BNC ZSCJ-2-1+
BRACKET (OPTION "B")
BRACKET (OPTION "BR")

+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. |
| Internal Dissipation | 0.125W max. |
| Permanent damage may occur if any of these limits are exceeded. | |

Coaxial Connections

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

Features

- low insertion loss, 0.6 dB typ.
- high isolation, 35 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- rugged shielded case

Applications

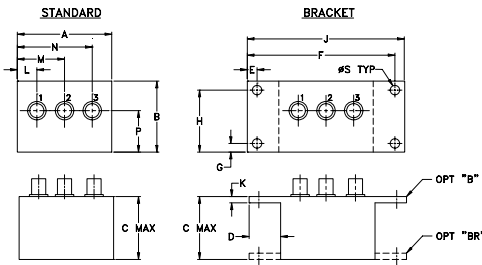
- VHF
- signal processing
- radio communication

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 |
| | Typ. | Min | Typ. | Min | Typ. | Min | Typ. | Max. | Typ. | Max. | Typ. | Max. | Max. | Max. | Max. | Max. | Max. | Max. |
| f_L - f_U | | | | | | | | | | | | | | | | | | |
| 1-200 | 35 | 30 | 35 | 25 | 30 | 23 | 0.75 | 1.0 | 0.6 | 0.8 | 0.75 | 1.2 | 2 | 2.5 | 4 | 0.3 | 0.15 | 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]

Outline Drawing



Outline Dimensions (inch/mm)

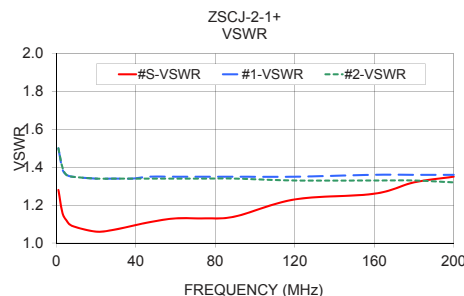
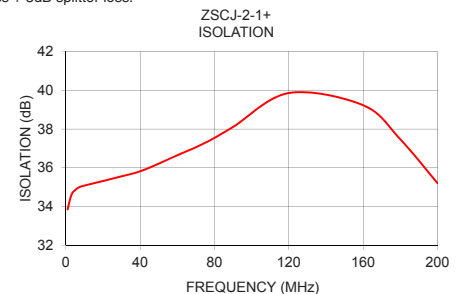
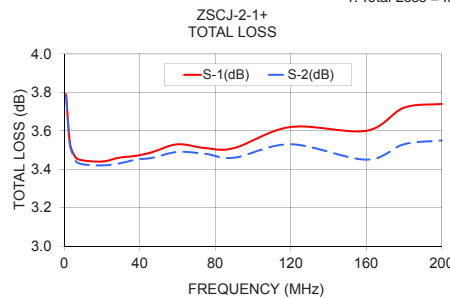
| A | B | C | D | E | F | G | H |
|-------|-------|-------|-------|------|-------|------|-------|
| 2.25 | 1.38 | 1.24 | .50 | .150 | 3.100 | .138 | 1.238 |
| 57.15 | 35.05 | 31.50 | 12.70 | 3.81 | 78.74 | 3.51 | 31.45 |

| J | K | L | M | N | P | S | wt |
|-------|------|-------|-------|-------|-------|------|-------|
| 3.25 | .10 | .40 | 1.15 | 1.86 | .64 | .150 | grams |
| 82.55 | 2.54 | 10.16 | 29.21 | 47.24 | 16.26 | 3.81 | 74.0 |

Typical Performance Data

| Frequency (MHz) | Total Loss ¹ (dB) | | Amplitude Unbalance (dB) | Isolation (dB) | Phase Unbalance (deg.) | VSWR S | VSWR 1 | VSWR 2 |
|-----------------|------------------------------|------|--------------------------|----------------|------------------------|--------|--------|--------|
| | S-1 | S-2 | | | | | | |
| 1.00 | 3.79 | 3.78 | 0.01 | 33.86 | 179.88 | 1.28 | 1.50 | 1.50 |
| 3.00 | 3.54 | 3.53 | 0.01 | 34.60 | 180.07 | 1.16 | 1.39 | 1.40 |
| 5.00 | 3.48 | 3.47 | 0.01 | 34.85 | 180.13 | 1.12 | 1.36 | 1.36 |
| 8.00 | 3.45 | 3.43 | 0.02 | 35.03 | 179.80 | 1.09 | 1.35 | 1.35 |
| 20.00 | 3.44 | 3.42 | 0.02 | 35.32 | 179.63 | 1.06 | 1.34 | 1.34 |
| 29.00 | 3.46 | 3.43 | 0.02 | 35.54 | 179.55 | 1.07 | 1.34 | 1.34 |
| 38.00 | 3.47 | 3.45 | 0.02 | 35.76 | 179.33 | 1.09 | 1.34 | 1.34 |
| 47.00 | 3.49 | 3.46 | 0.03 | 36.09 | 179.15 | 1.11 | 1.35 | 1.34 |
| 60.00 | 3.53 | 3.49 | 0.04 | 36.65 | 179.00 | 1.13 | 1.35 | 1.34 |
| 75.00 | 3.51 | 3.48 | 0.03 | 37.29 | 178.67 | 1.13 | 1.35 | 1.34 |
| 90.00 | 3.51 | 3.46 | 0.06 | 38.11 | 178.40 | 1.14 | 1.35 | 1.34 |
| 120.00 | 3.62 | 3.53 | 0.09 | 39.86 | 178.03 | 1.23 | 1.35 | 1.33 |
| 160.00 | 3.60 | 3.45 | 0.15 | 39.23 | 177.31 | 1.26 | 1.36 | 1.33 |
| 180.00 | 3.72 | 3.53 | 0.19 | 37.47 | 177.20 | 1.32 | 1.36 | 1.33 |
| 200.00 | 3.74 | 3.55 | 0.19 | 35.21 | 176.99 | 1.35 | 1.36 | 1.32 |

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



electrical schematic



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
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