

Coaxial Power Splitter/Combiner

ZMSC-3-1+

3 Way-0° 50Ω 1 to 200 MHz

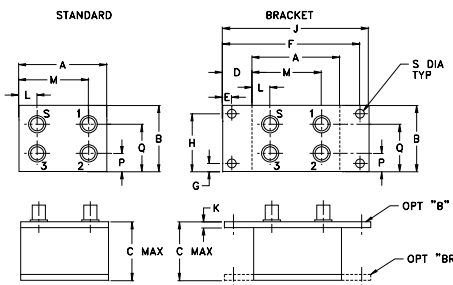
Maximum Ratings

| | |
|-----------------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 1W max. |
| Internal Dissipation | 0.375W max. |

Coaxial Connections

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

Outline Drawing



Outline Dimensions (inch/mm)

| | | | | | | | | | |
|-------|-------|-------|-------|------|-------|-------|-------|-------|--|
| A | B | C | D | E | F | G | H | | |
| 1.50 | 1.13 | 1.00 | .50 | .155 | 2.345 | .138 | .987 | | |
| 38.10 | 28.70 | 25.40 | 12.70 | 3.94 | 59.56 | 3.51 | 25.07 | | |
| J | K | L | M | N | P | Q | S | wt | |
| 2.50 | .10 | .50 | 1.00 | -- | .31 | .81 | .150 | grams | |
| 63.50 | 2.54 | 12.70 | 25.40 | -- | 7.87 | 20.57 | 3.81 | 60.0 | |

Features

- rugged shielded case

Applications

- VHF
- instrumentation
- radio communication system



Generic photo used for illustration purposes only

CASE STYLE: P26
Connectors Model
SMA ZMSC-3-1+
BRACKET (OPTION "B")
BRACKET (OPTION "BR")

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

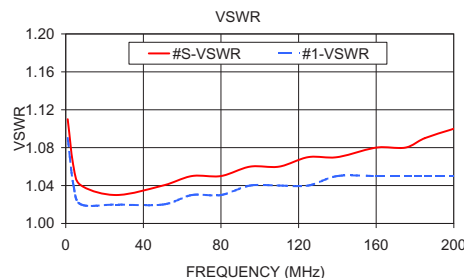
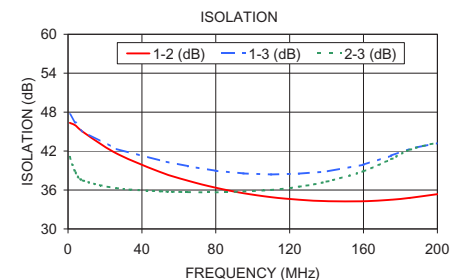
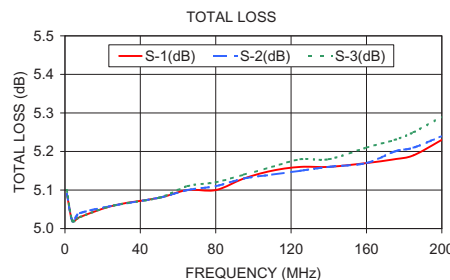
| FREQ. RANGE (MHz) | ISOLATION (dB) | | | | | | INSERTION LOSS (dB) ABOVE 4.8 dB | | | | | | PHASE UNBALANCE (Degrees) | | | AMPLITUDE UNBALANCE (dB) | | |
|-------------------|----------------|-----|------|-----|------|-----|----------------------------------|------|------|------|------|------|---------------------------|------|------|--------------------------|------|------|
| | 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. |
| 1-200 | 45 | 35 | 40 | 25 | 40 | 25 | 0.3 | 0.5 | 0.4 | 0.7 | 0.6 | 1.0 | 1 | 2 | 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) | Total Loss ¹ (dB) | | | Amp. Unbal. (dB) | Isolation (dB) | | | Phase Unbal. (deg.) | VSWR S | VSWR 1 | VSWR 2 | VSWR 3 |
|-------------|------------------------------|------|------|------------------|----------------|-------|-------|---------------------|--------|--------|--------|--------|
| | S-1 | S-2 | S-3 | | 1-2 | 1-3 | 2-3 | | | | | |
| 1.00 | 5.09 | 5.09 | 5.10 | 0.01 | 46.35 | 47.66 | 41.10 | 0.06 | 1.11 | 1.09 | 1.09 | 1.09 |
| 4.00 | 5.02 | 5.02 | 5.02 | 0.01 | 45.95 | 46.40 | 38.74 | 0.07 | 1.06 | 1.04 | 1.03 | 1.04 |
| 8.00 | 5.03 | 5.04 | 5.03 | 0.01 | 44.98 | 45.00 | 37.47 | 0.09 | 1.04 | 1.02 | 1.02 | 1.02 |
| 26.00 | 5.06 | 5.06 | 5.06 | 0.00 | 41.67 | 42.34 | 36.29 | 0.19 | 1.03 | 1.02 | 1.02 | 1.02 |
| 50.00 | 5.08 | 5.08 | 5.08 | 0.00 | 38.76 | 40.53 | 35.80 | 0.43 | 1.04 | 1.02 | 1.02 | 1.02 |
| 65.00 | 5.10 | 5.10 | 5.11 | 0.01 | 37.43 | 39.67 | 35.68 | 0.53 | 1.05 | 1.03 | 1.02 | 1.02 |
| 80.00 | 5.10 | 5.11 | 5.12 | 0.02 | 36.35 | 38.96 | 35.64 | 0.64 | 1.05 | 1.03 | 1.02 | 1.02 |
| 95.00 | 5.13 | 5.13 | 5.14 | 0.01 | 35.50 | 38.55 | 35.78 | 0.79 | 1.06 | 1.04 | 1.02 | 1.02 |
| 110.00 | 5.15 | 5.14 | 5.16 | 0.02 | 34.89 | 38.39 | 36.01 | 0.90 | 1.06 | 1.04 | 1.02 | 1.02 |
| 125.00 | 5.16 | 5.15 | 5.18 | 0.02 | 34.50 | 38.52 | 36.51 | 0.95 | 1.07 | 1.04 | 1.02 | 1.02 |
| 140.00 | 5.16 | 5.16 | 5.18 | 0.03 | 34.28 | 38.84 | 37.29 | 1.08 | 1.07 | 1.05 | 1.02 | 1.02 |
| 160.00 | 5.17 | 5.17 | 5.21 | 0.04 | 34.27 | 39.90 | 38.89 | 1.17 | 1.08 | 1.05 | 1.02 | 1.02 |
| 175.00 | 5.18 | 5.20 | 5.23 | 0.05 | 34.50 | 41.29 | 40.75 | 1.29 | 1.08 | 1.05 | 1.02 | 1.02 |
| 185.00 | 5.19 | 5.21 | 5.25 | 0.06 | 34.78 | 42.35 | 42.20 | 1.31 | 1.09 | 1.05 | 1.02 | 1.02 |
| 200.00 | 5.23 | 5.24 | 5.29 | 0.06 | 35.36 | 43.22 | 43.31 | 1.48 | 1.10 | 1.05 | 1.01 | 1.02 |

1. Total Loss = Insertion Loss + 4.8dB 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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