*Coaxial*

# Power Splitter/Combiner

## ZMSC-2-2

2 Way-0° 50Ω 0.002 to 60 MHz

*HT-Series Tight Spot SMA Wrench From $24.95*

CASE STYLE: M21

| Connectors | Model |
|---|---|
| **SMA** | ZMSC-2-2 |
| **BRACKET (OPTION "B")** | |
| **BRACKET (OPTION "BR")** | |

### 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 |

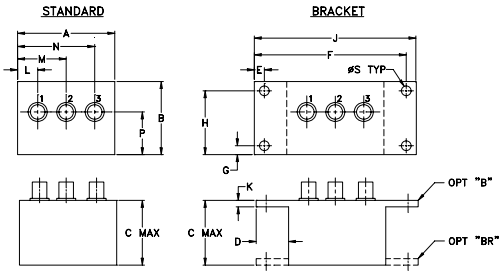
### Features

- wideband, 0.002 to 60 MHz
- low insertion loss, 0.3 dB typ.
- good isolation, 30 dB typ.
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 0.2 deg. typ.
- rugged shielded case

### Applications

- HF
- amateur radio
- federal communications

### 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 | S | wt |
|---|---|---|---|---|---|---|---|
| 2.50 | .10 | .31 | .75 | 1.19 | .66 | .150 | grams |
| 63.50 | 2.54 | 7.87 | 19.05 | 30.23 | 16.76 | 3.81 | 40.0 |

### 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. | Min | Typ. | Min | Typ. | Min | Typ. | Max. | Typ. | Max. | Typ. | Max. | Max. | Max. | Max. | Max. | Max. | Max. |
| 0.002-60 | 27 | 20 | 30 | 20 | 27 | 20 | 0.3 | 0.6 | 0.3 | 0.6 | 0.6 | 1.0 | 2 | 3 | 4 | 0.15 | 0.25 | 0.3 |

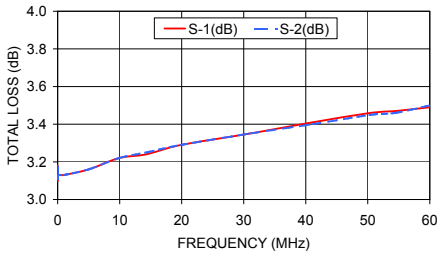
L = low range [$f_L$ to 10 $f_L$] M = mid range [10 $f_L$ to $f_U$/2] U= upper range [$f_U$/2 to $f_U$]
* Isolation specified to 0.004 MHz

### Typical Performance Data

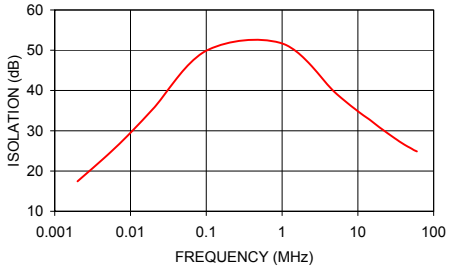
| Frequency (MHz) | Total Loss[1] (dB) | | Amplitude Unbalance (dB) | Isolation (dB) | VSWR S | VSWR 1 | VSWR 2 |
|---|---|---|---|---|---|---|---|
| | S-1 | S-2 | | | | | |
| 0.002 | 3.18 | 3.17 | 0.01 | 17.44 | 1.30 | 1.62 | 1.62 |
| 0.01 | 3.13 | 3.12 | 0.01 | 24.03 | 1.18 | 1.06 | 1.06 |
| 0.01 | 3.12 | 3.11 | 0.01 | 29.51 | 1.17 | 1.06 | 1.06 |
| 0.02 | 3.10 | 3.11 | 0.01 | 35.51 | 1.18 | 1.06 | 1.05 |
| 0.10 | 3.13 | 3.13 | 0.00 | 49.92 | 1.19 | 1.05 | 1.05 |
| 1.00 | 3.13 | 3.13 | 0.00 | 51.68 | 1.20 | 1.04 | 1.04 |
| 5.00 | 3.16 | 3.16 | 0.00 | 39.50 | 1.21 | 1.04 | 1.03 |
| 9.90 | 3.22 | 3.22 | 0.00 | 34.91 | 1.22 | 1.04 | 1.04 |
| 14.30 | 3.24 | 3.25 | 0.01 | 32.76 | 1.23 | 1.04 | 1.04 |
| 19.90 | 3.29 | 3.29 | 0.00 | 30.66 | 1.23 | 1.05 | 1.05 |
| 30.90 | 3.35 | 3.35 | 0.00 | 28.08 | 1.23 | 1.07 | 1.07 |
| 41.10 | 3.41 | 3.40 | 0.01 | 26.55 | 1.22 | 1.09 | 1.09 |
| 50.50 | 3.46 | 3.45 | 0.01 | 25.62 | 1.22 | 1.12 | 1.12 |
| 54.50 | 3.47 | 3.46 | 0.01 | 25.23 | 1.23 | 1.10 | 1.10 |
| 60.00 | 3.49 | 3.50 | 0.01 | 24.87 | 1.22 | 1.12 | 1.12 |

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

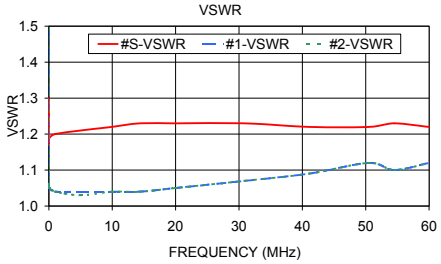
ZMSC-2-2
TOTAL LOSS



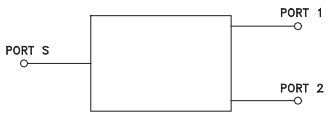

ZMSC-2-2
ISOLATION




ZMSC-2-2
VSWR




### electrical schematic




Notes

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