

Coaxial

# Power Splitter/Combiner

## ZESC-2-11

2 Way-0° 50Ω 10 to 2000 MHz



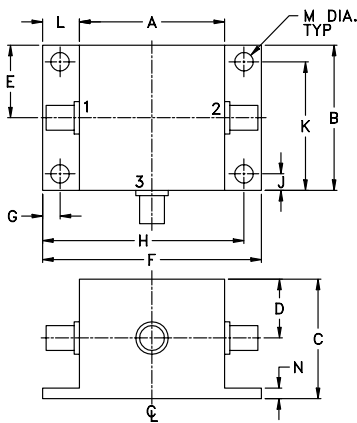
### Maximum Ratings

|                             |                |
|-----------------------------|----------------|
| Operating Temperature       | -55°C to 100°C |
| Storage Temperature         | -55°C to 100°C |
| Power Input (as a splitter) | 1W max.        |
| Internal Dissipation        | 0.125W max.    |

### Coaxial Connections

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

### Outline Drawing



### Outline Dimensions (inch/mm)

|       |       |       |      |       |       |       |
|-------|-------|-------|------|-------|-------|-------|
| A     | B     | C     | D    | E     | F     | G     |
| .83   | .83   | .75   | .37  | .42   | 1.25  | .100  |
| 21.08 | 21.08 | 19.05 | 9.40 | 10.67 | 31.75 | 2.54  |
| H     | J     | K     | L    | M     | N     | wt    |
| 1.150 | .095  | .735  | .21  | .106  | .06   | grams |
| 29.21 | 2.41  | 18.67 | 5.33 | 2.69  | 1.52  | 34    |

### Features

- wideband, 10 to 2000 MHz
- low insertion loss, 0.5 dB typ.
- good isolation, 19 dB typ.
- rugged shielded case

### Applications

- HF/VHF
- instrumentation
- communication systems

CASE STYLE: V37

| Connectors | Model     | Price   | Qty.  |
|------------|-----------|---------|-------|
| SMA        | ZESC-2-11 | \$71.95 | (1-9) |

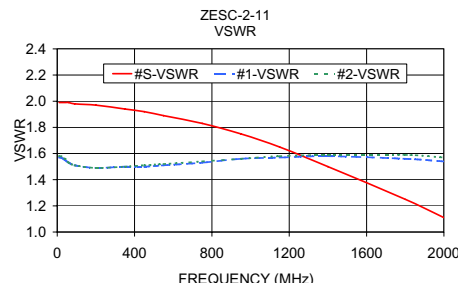
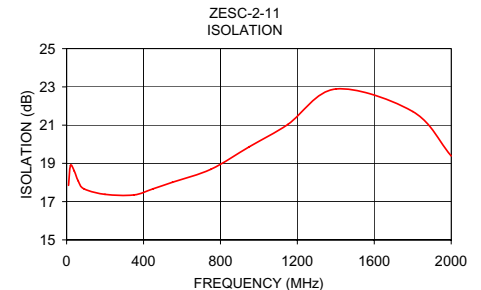
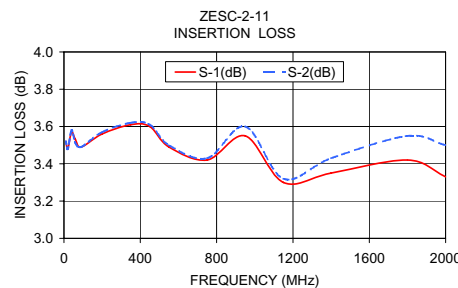
### Splitter Electrical Specifications

| 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.           | Min | Typ. | Min | Typ. | Min | Typ.                             | Max. | Typ. | Max. | Typ. | Max. | Max.                      | Max. | Max. | Max.                     | Max. | Max. |
| 10-2000           | 19             | 10  | 18   | 13  | 20   | 11  | 0.5                              | 0.9  | 0.5  | 1.0  | 0.6  | 1.2  | 1                         | 3    | 6    | 0.2                      | 0.3  | 0.5  |

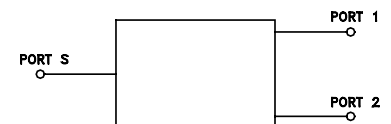
L = low range [ $f_L$  to 10  $f_L$ ] M = mid range [10  $f_L$  to  $f_U/2$ ] U = upper range [ $f_U/2$  to  $f_U$ ]

### 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  |                          |                |                        |        |        |        |
| 10.00           | 3.52                | 3.52 | 0.00                     | 17.85          | 0.03                   | 1.99   | 1.57   | 1.58   |
| 20.00           | 3.48                | 3.48 | 0.01                     | 18.89          | 0.05                   | 1.99   | 1.57   | 1.58   |
| 40.00           | 3.57                | 3.58 | 0.01                     | 18.60          | 0.03                   | 1.99   | 1.55   | 1.56   |
| 60.00           | 3.53                | 3.51 | 0.02                     | 18.09          | 0.02                   | 1.99   | 1.53   | 1.53   |
| 90.00           | 3.49                | 3.49 | 0.01                     | 17.67          | 0.07                   | 1.98   | 1.51   | 1.51   |
| 200.00          | 3.56                | 3.57 | 0.01                     | 17.38          | 0.05                   | 1.97   | 1.49   | 1.49   |
| 350.00          | 3.61                | 3.62 | 0.01                     | 17.35          | 0.03                   | 1.94   | 1.50   | 1.50   |
| 450.00          | 3.60                | 3.61 | 0.02                     | 17.67          | 0.02                   | 1.92   | 1.50   | 1.51   |
| 550.00          | 3.49                | 3.50 | 0.01                     | 18.01          | 0.05                   | 1.89   | 1.51   | 1.52   |
| 750.00          | 3.42                | 3.43 | 0.01                     | 18.69          | 0.11                   | 1.83   | 1.53   | 1.54   |
| 950.00          | 3.55                | 3.60 | 0.04                     | 19.87          | 0.07                   | 1.75   | 1.56   | 1.56   |
| 1150.00         | 3.30                | 3.32 | 0.02                     | 21.03          | 0.08                   | 1.65   | 1.57   | 1.58   |
| 1400.00         | 3.35                | 3.43 | 0.08                     | 22.89          | 0.16                   | 1.50   | 1.58   | 1.59   |
| 1800.00         | 3.42                | 3.55 | 0.13                     | 21.71          | 0.05                   | 1.25   | 1.56   | 1.59   |
| 2000.00         | 3.33                | 3.50 | 0.17                     | 19.39          | 0.25                   | 1.11   | 1.54   | 1.57   |



### electrical schematic



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