

2 Way-0° 50Ω 7400 to 12600 MHz

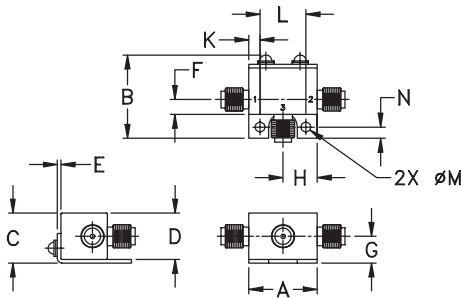
### Maximum Ratings

|                                                       |                             |
|-------------------------------------------------------|-----------------------------|
| Operating Temperature                                 | -40°C to 85°C               |
| Storage Temperature                                   | -55°C to 100°C              |
| Power Input (as a splitter)                           | 1.0W max.                   |
| Internal Dissipation (as a combiner)                  | 0.1W max.                   |
| DC Current                                            | 1.0 A (500mA for each port) |
| Permanent damage may occur if any of these limits are |                             |

### Coaxial Connections

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

### Outline Drawing



### Outline Dimensions (inch/mm)

| A     | B     | C     | D     | E    | F    | G    |
|-------|-------|-------|-------|------|------|------|
| .74   | .90   | .54   | .50   | .04  | .16  | .29  |
| 18.80 | 22.86 | 13.72 | 12.70 | 1.02 | 4.06 | 7.37 |

| H    | J  | K    | L     | M    | N    | wt    |
|------|----|------|-------|------|------|-------|
| .37  | -- | .122 | .496  | .106 | .122 | grams |
| 9.40 | -- | 3.10 | 12.60 | 2.69 | 3.10 | 20.0  |

### Features

- low insertion loss, 0.3 dB typ.
- excellent amplitude unbalance
- very good phase unbalance
- small size
- low cost
- protected under U.S. Patent 6,790,049 & 6,963,255

### Applications

- SHF
- defense
- cable tv relay
- DECT
- DBS



Generic photo used for illustration purposes only

CASE STYLE: FL905

Connectors Model

SMA ZX10-2-126-S+

**+RoHS Compliant**

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

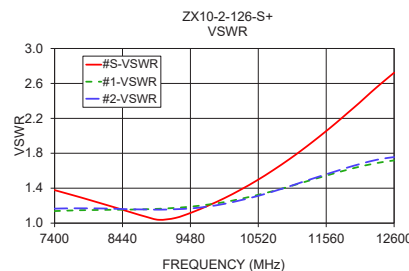
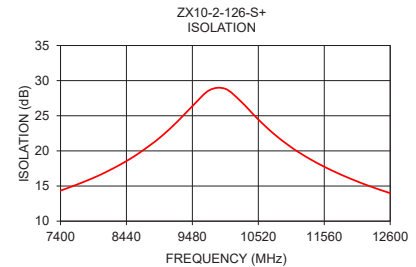
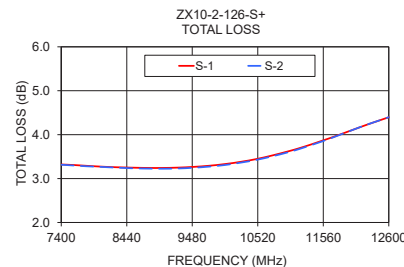
### Electrical Specifications (T<sub>AMB</sub>=25°C)

| FREQ. RANGE (MHz)              | ISOLATION (dB) | INSERTION LOSS (dB) ABOVE 3.0 dB | PHASE UNBALANCE (Degrees) | AMPLITUDE UNBALANCE (dB) |
|--------------------------------|----------------|----------------------------------|---------------------------|--------------------------|
| f <sub>L</sub> -f <sub>U</sub> | Typ. Min.      | Max.                             | Max.                      | Max.                     |
| 7400-12600                     | 23 10          | 0.6 1.7                          | 10.0                      | 0.5                      |
| 9000-11000                     | 23 16          | 0.3 0.7                          | 7.0                       | 0.3                      |

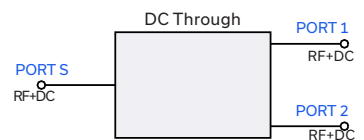
### Typical Performance Data

| Frequency (MHz) | Total Loss <sup>1</sup> (dB) | Amplitude Unbalance (dB) | Isolation (dB) | Phase Unbalance (deg.) | VSWR S | VSWR 1 | VSWR 2 |
|-----------------|------------------------------|--------------------------|----------------|------------------------|--------|--------|--------|
|                 | S-1 S-2                      |                          |                |                        |        |        |        |
| 7400            | 3.32 3.31                    | 0.01                     | 14.34          | 1.51                   | 1.38   | 1.14   | 1.17   |
| 7800            | 3.29 3.28                    | 0.01                     | 15.71          | 1.67                   | 1.29   | 1.15   | 1.17   |
| 8200            | 3.26 3.25                    | 0.01                     | 17.37          | 1.75                   | 1.21   | 1.15   | 1.17   |
| 8600            | 3.25 3.23                    | 0.01                     | 19.45          | 1.84                   | 1.12   | 1.16   | 1.16   |
| 9000            | 3.24 3.22                    | 0.02                     | 22.14          | 1.95                   | 1.04   | 1.16   | 1.15   |
| 9400            | 3.27 3.25                    | 0.02                     | 26.56          | 2.09                   | 1.12   | 1.19   | 1.17   |
| 9800            | 3.29 3.27                    | 0.02                     | 28.65          | 2.17                   | 1.20   | 1.21   | 1.19   |
| 10200           | 3.38 3.36                    | 0.02                     | 27.00          | 2.31                   | 1.38   | 1.28   | 1.26   |
| 10600           | 3.44 3.43                    | 0.02                     | 24.65          | 2.37                   | 1.49   | 1.32   | 1.31   |
| 11000           | 3.62 3.60                    | 0.02                     | 20.77          | 2.52                   | 1.73   | 1.42   | 1.42   |
| 11400           | 3.77 3.76                    | 0.02                     | 18.73          | 2.64                   | 1.93   | 1.50   | 1.51   |
| 11800           | 3.94 3.93                    | 0.01                     | 17.09          | 2.76                   | 2.15   | 1.58   | 1.60   |
| 12200           | 4.22 4.22                    | 0.00                     | 15.09          | 2.88                   | 2.50   | 1.67   | 1.71   |
| 12600           | 4.40 4.40                    | 0.00                     | 13.99          | 2.98                   | 2.72   | 1.72   | 1.76   |

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



### electrical schematic



### Notes

- A. 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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