

Coaxial Power Splitter/Combiner

ZX10-4-14+ ZX10-4-14

4 Way-0° 50Ω 1100 to 1450 MHz

Maximum Ratings

| | |
|-----------------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 2.5W max.* |
| Power Input (as a combiner) | 0.125W max. |

*maximum VSWR at output 1.2:1
Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

| | |
|----------|---|
| SUM PORT | S |
| PORT 1 | 1 |
| PORT 2 | 2 |
| PORT 3 | 3 |
| PORT 4 | 4 |

Features

- low insertion loss, 0.8 dB typ.
- high isolation, 20 dB typ.
- rigid unibody construction
- gold plated connectors; nickel plated body
- low cost
- small size
- protected by US patent 6,790,049

Applications

- satellite distribution
- antenna arrays
- signal distribution
- test bench

Electrical Specifications (T_{AMB}=25°C)

| FREQ. RANGE (MHz) | ISOLATION (dB) | | INSERTION LOSS (dB) ABOVE 6 dB | | PHASE UNBALANCE (Deg.) | AMPLITUDE UNBALANCE (dB) | INPUT VSWR (:1) | OUTPUT VSWR (:1) |
|--------------------------------|----------------|------|--------------------------------|------|------------------------|--------------------------|-----------------|------------------|
| | Typ. | Min. | Typ. | Max. | | | | |
| f _L -f _U | | | | | Max. | Max. | Typ. | Typ. |
| 1100-1450 | 20 | 15 | 0.8 | 1.3 | 7.0 | 0.8 | 1.3 | 1.3 |



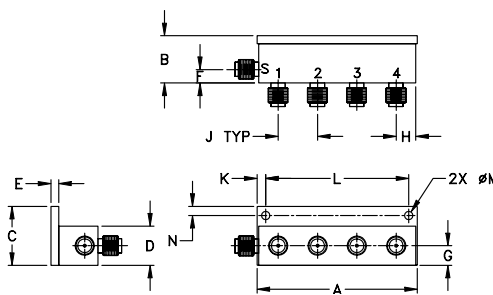
CASE STYLE: GR1026

| Connectors | Model | Price | Qty. |
|------------|----------------|-------------|--------|
| SMA | ZX10-4-14-S(+) | \$38.95 ea. | (1-24) |

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

Outline Drawing



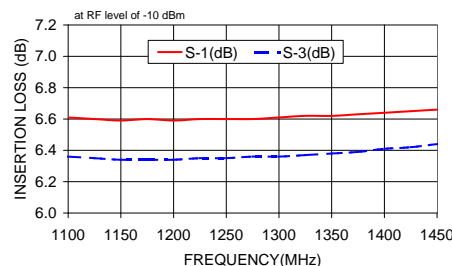
Outline Dimensions (inch/mm)

| A | B | C | D | E | F | G | H |
|-------|-------|-------|-------|------|----------|------|------|
| 2.04 | .60 | .75 | .50 | .10 | .17 | .25 | .25 |
| 51.82 | 15.24 | 19.05 | 12.70 | 2.54 | 4.32 | 6.35 | 6.35 |
| J | K | L | M | N | wt grams | | |
| .50 | .11 | 1.820 | .106 | .12 | 60.0 | | |
| 12.70 | 2.79 | 46.23 | 2.69 | 3.05 | | | |

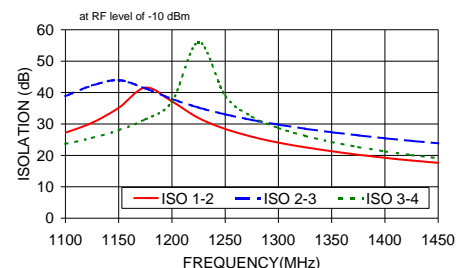
Typical Performance Data

| Freq. (MHz) | Insertion Loss (dB) | | | | Amp. Unbal. (dB) | Isolation (dB) | | | Phase Unbal. (deg.) | VSWR S | VSWR 1 | VSWR 2 | VSWR 3 | VSWR 4 |
|-------------|---------------------|------|------|------|------------------|----------------|-------|-------|---------------------|--------|--------|--------|--------|--------|
| | S-1 | S-2 | S-3 | S-4 | | 1-2 | 2-3 | 3-4 | | | | | | |
| 1100.00 | 6.61 | 6.61 | 6.36 | 6.30 | 0.31 | 27.22 | 38.86 | 23.67 | 1.10 | 1.23 | 1.19 | 1.24 | 1.20 | 1.27 |
| 1125.00 | 6.60 | 6.62 | 6.35 | 6.28 | 0.34 | 30.37 | 42.24 | 25.56 | 1.22 | 1.20 | 1.20 | 1.25 | 1.21 | 1.27 |
| 1150.00 | 6.59 | 6.63 | 6.34 | 6.27 | 0.35 | 35.13 | 43.96 | 28.03 | 1.34 | 1.17 | 1.20 | 1.25 | 1.21 | 1.28 |
| 1175.00 | 6.60 | 6.64 | 6.34 | 6.26 | 0.37 | 41.57 | 41.33 | 31.47 | 1.44 | 1.14 | 1.20 | 1.25 | 1.21 | 1.28 |
| 1200.00 | 6.59 | 6.65 | 6.34 | 6.25 | 0.40 | 37.19 | 37.96 | 37.11 | 1.55 | 1.12 | 1.20 | 1.25 | 1.21 | 1.28 |
| 1225.00 | 6.60 | 6.66 | 6.35 | 6.25 | 0.41 | 31.89 | 35.22 | 56.05 | 1.64 | 1.10 | 1.20 | 1.26 | 1.22 | 1.28 |
| 1250.00 | 6.60 | 6.68 | 6.35 | 6.24 | 0.43 | 28.44 | 33.05 | 38.94 | 1.74 | 1.09 | 1.21 | 1.26 | 1.23 | 1.28 |
| 1275.00 | 6.60 | 6.69 | 6.36 | 6.24 | 0.45 | 25.95 | 31.27 | 32.36 | 1.80 | 1.08 | 1.21 | 1.26 | 1.23 | 1.28 |
| 1300.00 | 6.61 | 6.71 | 6.36 | 6.24 | 0.47 | 24.06 | 29.78 | 28.72 | 1.84 | 1.07 | 1.21 | 1.27 | 1.23 | 1.28 |
| 1325.00 | 6.62 | 6.73 | 6.37 | 6.24 | 0.49 | 22.57 | 28.49 | 26.22 | 1.92 | 1.08 | 1.21 | 1.27 | 1.23 | 1.29 |
| 1350.00 | 6.62 | 6.74 | 6.38 | 6.23 | 0.51 | 21.31 | 27.36 | 24.26 | 1.98 | 1.09 | 1.21 | 1.28 | 1.23 | 1.29 |
| 1375.00 | 6.63 | 6.76 | 6.39 | 6.24 | 0.52 | 20.21 | 26.37 | 22.65 | 2.03 | 1.09 | 1.21 | 1.28 | 1.23 | 1.29 |
| 1400.00 | 6.64 | 6.78 | 6.41 | 6.24 | 0.54 | 19.23 | 25.46 | 21.27 | 2.10 | 1.10 | 1.21 | 1.28 | 1.24 | 1.29 |
| 1425.00 | 6.65 | 6.79 | 6.42 | 6.24 | 0.55 | 18.38 | 24.63 | 20.10 | 2.17 | 1.10 | 1.21 | 1.27 | 1.24 | 1.29 |
| 1450.00 | 6.66 | 6.80 | 6.44 | 6.23 | 0.57 | 17.63 | 23.86 | 19.10 | 2.28 | 1.11 | 1.21 | 1.27 | 1.24 | 1.28 |

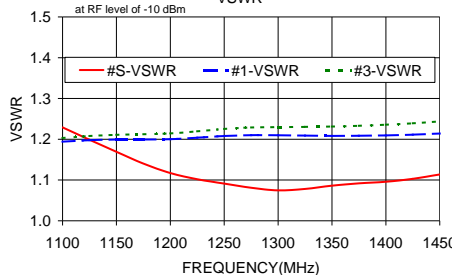
ZX10-4-14 INSERTION LOSS



ZX10-4-14 ISOLATION



ZX10-4-14 VSWR



electrical schematic



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IFIRF MICROWAVE COMPONENTS

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