

Coaxial

Power Splitter/Combiner

ZBSC-413+

4 Way-0° 50Ω 10 to 800 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 | 0.250W max. |

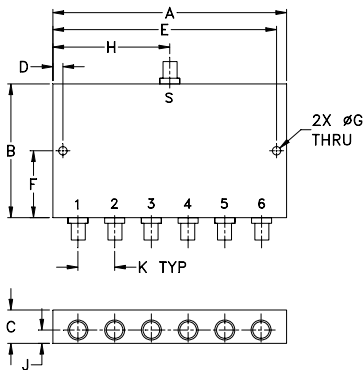
Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

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

Ports 1,2,3,4 occupy positions 2,3,4,5 in outline drawing; positions 1,6 not occupied.

Outline Drawing



Outline Dimensions (inch/mm)

| | | | | | |
|-------|-------|-------|-------|-------|-------|
| A | B | C | D | E | F |
| 3.50 | 2.00 | .50 | .150 | 3.350 | 1.00 |
| 88.90 | 50.80 | 12.70 | 3.81 | 85.09 | 25.40 |
| G | H | J | K | wt | |
| .125 | 1.75 | .20 | .55 | grams | |
| 3.18 | 44.45 | 5.08 | 13.97 | 120 | |

Features

- wideband, 10 to 800 MHz
- rugged, shielded case

Applications

- VHF/UHF
- receivers/transmitters



CASE STYLE: UU102

| Connectors | Model | Price | Qty. |
|------------|-----------|---------|-------|
| SMA | ZBSC-413+ | \$99.95 | (1-9) |

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

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

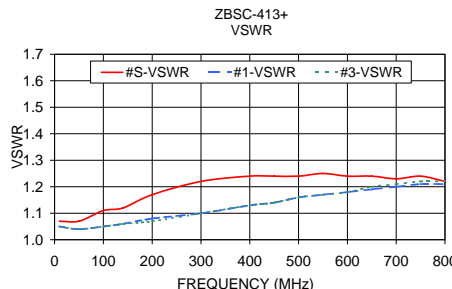
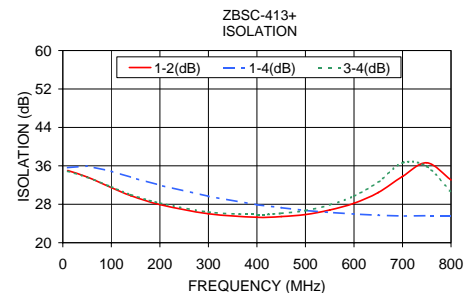
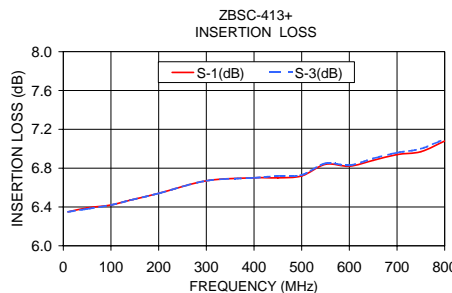
Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) | | | | | | INSERTION LOSS (dB) ABOVE 6.0 dB | | | | | | PHASE UNBALANCE (Degrees) | | | AMPLITUDE UNBALANCE (dB) | | |
|--------------------------------|----------------|-----|------|-----|------|-----|----------------------------------|------|------|------|------|------|---------------------------|------|------|--------------------------|------|------|
| | L | | M | | U | | L | | M | | U | | L | M | U | L | M | U |
| | Typ. | Min | Typ. | Min | Typ. | Min | Typ. | Max. | Typ. | Max. | Typ. | Max. | Max. | Max. | Max. | Max. | Max. | Max. |
| f _L -f _U | | | | | | | | | | | | | | | | | | |
| 10-800 | 26 | 20 | 18 | 15 | 18 | 15 | 0.6 | 1.0 | 1.0 | 1.5 | 1.6 | 2.0 | 4 | 8 | 8 | 0.2 | 0.4 | 0.6 |

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) | 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 | 1-4 | 3-4 | | | | | | |
| 10.00 | 6.35 | 6.36 | 6.35 | 6.34 | 0.01 | 35.02 | 35.64 | 34.88 | 0.05 | 1.07 | 1.05 | 1.05 | 1.05 | 1.05 |
| 50.00 | 6.39 | 6.38 | 6.38 | 6.39 | 0.01 | 33.68 | 35.96 | 33.63 | 0.06 | 1.07 | 1.04 | 1.04 | 1.04 | 1.05 |
| 100.00 | 6.42 | 6.41 | 6.42 | 6.42 | 0.00 | 31.47 | 34.89 | 31.62 | 0.14 | 1.11 | 1.05 | 1.05 | 1.05 | 1.04 |
| 140.00 | 6.47 | 6.47 | 6.47 | 6.47 | 0.00 | 29.80 | 33.64 | 30.02 | 0.22 | 1.12 | 1.06 | 1.06 | 1.06 | 1.07 |
| 200.00 | 6.54 | 6.54 | 6.54 | 6.55 | 0.01 | 27.93 | 31.98 | 28.25 | 0.12 | 1.17 | 1.08 | 1.07 | 1.07 | 1.08 |
| 300.00 | 6.67 | 6.67 | 6.67 | 6.66 | 0.01 | 26.02 | 29.66 | 26.40 | 0.24 | 1.22 | 1.10 | 1.10 | 1.10 | 1.11 |
| 400.00 | 6.70 | 6.71 | 6.70 | 6.71 | 0.01 | 25.30 | 27.90 | 25.88 | 0.29 | 1.24 | 1.13 | 1.13 | 1.13 | 1.15 |
| 450.00 | 6.70 | 6.71 | 6.72 | 6.71 | 0.01 | 25.45 | 27.31 | 25.88 | 0.41 | 1.24 | 1.14 | 1.14 | 1.14 | 1.14 |
| 500.00 | 6.72 | 6.72 | 6.73 | 6.73 | 0.01 | 25.86 | 26.70 | 26.70 | 0.46 | 1.24 | 1.16 | 1.16 | 1.16 | 1.19 |
| 550.00 | 6.84 | 6.84 | 6.85 | 6.84 | 0.01 | 26.81 | 26.31 | 27.88 | 0.48 | 1.25 | 1.17 | 1.17 | 1.17 | 1.18 |
| 600.00 | 6.82 | 6.83 | 6.83 | 6.83 | 0.01 | 28.21 | 25.97 | 29.70 | 0.45 | 1.24 | 1.18 | 1.19 | 1.18 | 1.21 |
| 650.00 | 6.88 | 6.88 | 6.90 | 6.90 | 0.02 | 30.44 | 25.73 | 32.60 | 0.51 | 1.24 | 1.19 | 1.20 | 1.20 | 1.22 |
| 700.00 | 6.94 | 6.95 | 6.96 | 6.96 | 0.02 | 33.79 | 25.57 | 36.63 | 0.80 | 1.23 | 1.20 | 1.21 | 1.21 | 1.23 |
| 750.00 | 6.97 | 6.98 | 7.00 | 6.99 | 0.03 | 36.64 | 25.63 | 35.87 | 0.73 | 1.24 | 1.21 | 1.22 | 1.22 | 1.23 |
| 800.00 | 7.08 | 7.07 | 7.10 | 7.10 | 0.03 | 33.06 | 25.63 | 30.50 | 0.73 | 1.22 | 1.21 | 1.22 | 1.22 | 1.24 |



electrical schematic



For detailed performance specs & shopping online see web site



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