

Power Splitter/Combiner

ZAPD-232-75+

2 Way-0° 75Ω 700 to 2450 MHz

Maximum Ratings

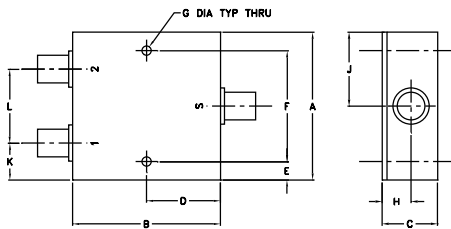
| | |
|-----------------------------|----------------------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 10W max. |
| Internal Dissipation | 0.5W max. |
| DC Current | 1.0A (500mA for each port) |

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

Coaxial Connections

| | |
|----------|---|
| SUM PORT | S |
| PORT 1 | 1 |
| PORT 2 | 2 |

Outline Drawing

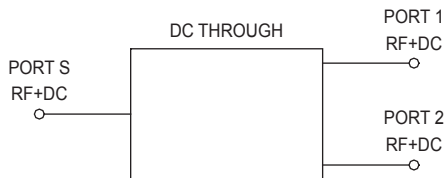


Outline Dimensions (inch/mm)

| | | | | | | |
|-------|-------|-------|-------|------|-------|------|
| A | B | C | D | E | F | G |
| 2.00 | 2.00 | .75 | 1.00 | .13 | 1.750 | .125 |
| 50.80 | 50.80 | 19.05 | 25.40 | 3.30 | 44.45 | 3.18 |

| | | | | |
|------|-------|-------|-------|-------|
| H | J | K | L | wt |
| .39 | 1.00 | .50 | 1.00 | grams |
| 9.91 | 25.40 | 12.70 | 25.40 | 170.0 |

Electrical Schematic



Features

- wideband, 700-2450 MHz
- low insertion loss, 0.5 dB typ.
- good isolation, 25 dB typ.
- excellent output VSWR, 1.15:1 typ.
- excellent input VSWR, 1.25:1 typ.

Applications

- cable TV
- cellular
- GPS
- PCS
- WCDMA
- communication systems
- L-Band



CASE STYLE: F53

| | |
|------------|----------------|
| Connectors | Model |
| F-TYPE | ZAPD-232-75-F+ |

+RoHS Compliant

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

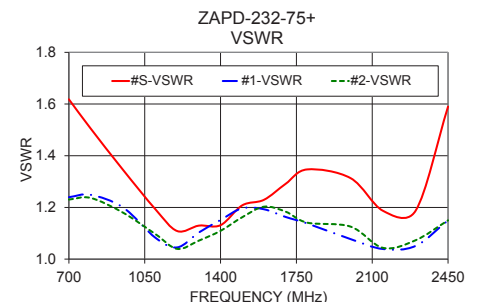
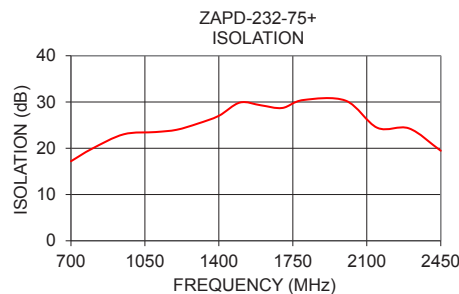
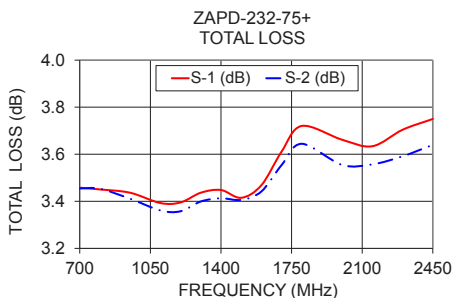
Electrical Specifications at 25°C

| Parameter | Frequency (MHz) | Min. | Typ. | Max. | Unit |
|------------------------------------|-----------------|------|------|------|--------|
| Frequency Range | | 700 | | 2450 | MHz |
| Insertion Loss Above 3.0 dB | 700 - 2450 | — | 0.5 | 1.0 | dB |
| Isolation | 700 - 2450 | 15 | 20 | — | dB |
| | 950 - 2300 | 20 | 25 | — | dB |
| Phase Unbalance | 700 - 2450 | — | 1.0 | 3.0 | Degree |
| Amplitude Unbalance | 700 - 2450 | — | 0.1 | 0.3 | dB |
| VSWR (Port S) | 700 - 2450 | — | 1.5 | 1.9 | :1 |
| | 950 - 2300 | — | 1.25 | 1.5 | :1 |
| VSWR (Port 1-2) | 700 - 2450 | — | 1.2 | 1.4 | :1 |
| | 950 - 2300 | — | 1.15 | 1.3 | :1 |

Typical Performance Data

| Frequency (MHz) | Total Loss ¹ (dB) | | Amp. Unbalance (dB) | Isolation (dB) | Phase Unbalance (deg.) | VSWR S | VSWR 1 | VSWR 2 |
|-----------------|------------------------------|------|---------------------|----------------|------------------------|--------|--------|--------|
| | S-1 | S-2 | | | | | | |
| 700 | 3.46 | 3.45 | 0.00 | 17.20 | 0.61 | 1.62 | 1.24 | 1.23 |
| 800 | 3.45 | 3.45 | 0.00 | 19.91 | 0.77 | 1.51 | 1.25 | 1.24 |
| 950 | 3.44 | 3.41 | 0.03 | 23.03 | 0.81 | 1.35 | 1.20 | 1.18 |
| 1100 | 3.39 | 3.36 | 0.03 | 23.51 | 0.86 | 1.19 | 1.08 | 1.10 |
| 1200 | 3.40 | 3.36 | 0.04 | 24.00 | 0.88 | 1.11 | 1.05 | 1.04 |
| 1300 | 3.44 | 3.40 | 0.04 | 25.33 | 0.78 | 1.13 | 1.10 | 1.07 |
| 1400 | 3.45 | 3.41 | 0.04 | 27.02 | 0.78 | 1.13 | 1.15 | 1.11 |
| 1500 | 3.41 | 3.41 | 0.01 | 29.89 | 1.09 | 1.21 | 1.20 | 1.16 |
| 1600 | 3.47 | 3.44 | 0.03 | 29.28 | 1.13 | 1.23 | 1.19 | 1.20 |
| 1700 | 3.61 | 3.55 | 0.06 | 28.71 | 1.17 | 1.29 | 1.16 | 1.18 |
| 1800 | 3.72 | 3.64 | 0.08 | 30.43 | 1.21 | 1.35 | 1.14 | 1.14 |
| 1900 | 3.72 | 3.62 | 0.10 | 38.03 | 1.19 | 1.34 | 1.10 | 1.12 |
| 2000 | 3.66 | 3.55 | 0.11 | 30.29 | 1.37 | 1.31 | 1.08 | 1.13 |
| 2150 | 3.63 | 3.56 | 0.08 | 24.42 | 1.31 | 1.19 | 1.04 | 1.04 |
| 2300 | 3.70 | 3.59 | 0.11 | 24.29 | 1.12 | 1.19 | 1.05 | 1.07 |
| 2450 | 3.75 | 3.64 | 0.11 | 19.47 | 1.25 | 1.59 | 1.15 | 1.15 |

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



Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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