

Coaxial

Power Splitter/Combiner

ZX10-2-622+

2 Way-0° 50Ω 2900 to 6200 MHz

Maximum Ratings

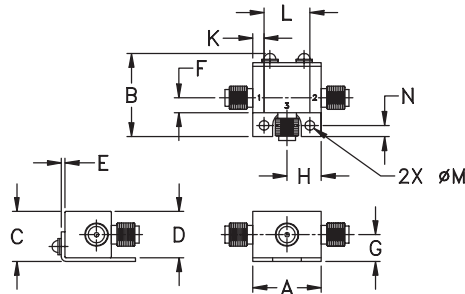
| | |
|--------------------------------------|----------------|
| Operating Temperature | -40°C to 85°C |
| Storage Temperature | -55°C to 100°C |
| Power Input (as a splitter) | 1.5W max. |
| Internal Dissipation (as a combiner) | 0.75W max. |

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

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

- wide bandwidth, 2900 to 6200 MHz
- excellent amplitude unbalance, 0.05 dB typ.
- very good phase unbalance, 1 deg. typ.
- small size
- low cost
- protected under U.S. Patent 6,790,049

Applications

- WiMax
- radar
- ISM
- WLAN
- instrumentation
- satellite communications

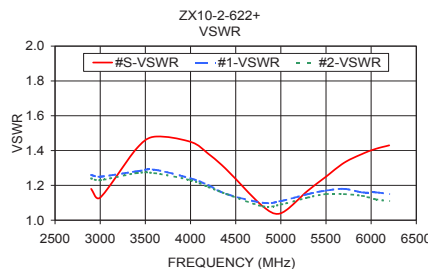
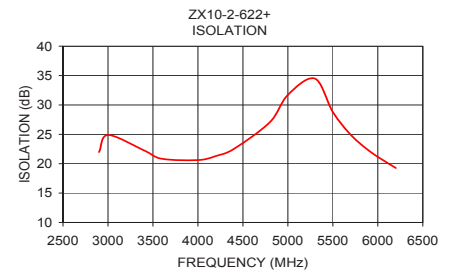
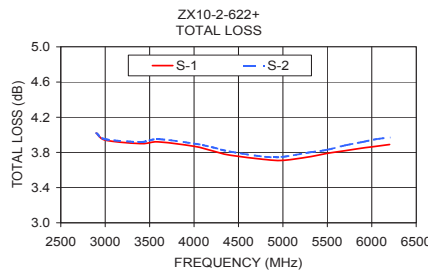
Electrical Specifications

| FREQ. RANGE (MHz) | ISOLATION (dB) | | INSERTION LOSS (dB) ABOVE 3.0 dB | | PHASE UNBALANCE (Degrees) | AMPLITUDE UNBALANCE (dB) |
|-------------------|----------------|------|----------------------------------|------|---------------------------|--------------------------|
| | Typ. | Min. | Typ. | Max. | Max. | Max. |
| f_L - f_U | | | | | | |
| 2900-6200 | 24 | 16 | 0.9 | 1.5 | 9.0 | 0.3 |
| 4400-5900 | 28 | 19 | 0.8 | 1.5 | 9.0 | 0.3 |

Typical Performance Data

| Frequency (MHz) | Total Loss ¹ (dB) | | Amplitude Unbalance (dB) | Isolation (dB) | Phase Unbalance (deg.) | VSWR S | VSWR 1 | VSWR 2 |
|-----------------|------------------------------|------|--------------------------|----------------|------------------------|--------|--------|--------|
| | S-1 | S-2 | | | | | | |
| 2900.00 | 4.02 | 4.02 | 0.00 | 21.98 | 0.69 | 1.18 | 1.26 | 1.24 |
| 3000.00 | 3.94 | 3.95 | 0.00 | 24.88 | 0.70 | 1.13 | 1.25 | 1.23 |
| 3400.00 | 3.90 | 3.92 | 0.02 | 22.27 | 0.77 | 1.41 | 1.28 | 1.27 |
| 3600.00 | 3.92 | 3.95 | 0.03 | 20.84 | 0.79 | 1.48 | 1.29 | 1.27 |
| 4000.00 | 3.87 | 3.90 | 0.03 | 20.62 | 0.87 | 1.45 | 1.24 | 1.23 |
| 4200.00 | 3.82 | 3.86 | 0.04 | 21.31 | 0.88 | 1.38 | 1.20 | 1.19 |
| 4400.00 | 3.77 | 3.81 | 0.04 | 22.52 | 0.84 | 1.29 | 1.15 | 1.15 |
| 4800.00 | 3.72 | 3.75 | 0.04 | 27.06 | 0.90 | 1.08 | 1.10 | 1.08 |
| 5000.00 | 3.71 | 3.75 | 0.04 | 31.71 | 0.95 | 1.04 | 1.11 | 1.09 |
| 5300.00 | 3.75 | 3.80 | 0.04 | 34.49 | 1.04 | 1.17 | 1.15 | 1.13 |
| 5500.00 | 3.79 | 3.83 | 0.05 | 28.78 | 1.11 | 1.25 | 1.17 | 1.15 |
| 5700.00 | 3.82 | 3.88 | 0.05 | 24.90 | 1.19 | 1.33 | 1.18 | 1.15 |
| 5900.00 | 3.85 | 3.92 | 0.07 | 22.23 | 1.26 | 1.38 | 1.16 | 1.14 |
| 6050.00 | 3.87 | 3.95 | 0.07 | 20.68 | 1.27 | 1.41 | 1.16 | 1.12 |
| 6200.00 | 3.89 | 3.97 | 0.08 | 19.27 | 1.27 | 1.43 | 1.15 | 1.11 |

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



electrical schematic



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.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

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