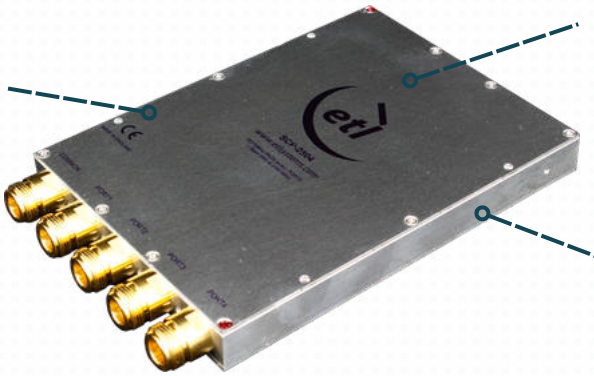
# Scorpion 4-Way Passive Splitter/Combiner

## L-band 850-2150MHz

**850-2150MHz**
Operating frequency range.



**Chassis Mounting**
Tapped screw & through hole for use with Scorpion 1U chassis mount system.

**Compact**
Housed in rugged compact enclosure.

| RF Parameters | | | | | | |
|---|---|---|---|---|---|---|
| | | S5S5 | N5N5 | B5B5 | B7B7 | F7F7 |
| Frequency Range | | 850-2150MHz | | | | |
| RF Connectors | | 50Ω SMA | 50Ω N-Type | 50Ω BNC | 75Ω BNC | 75Ω F-Type |
| Flatness ± (dB) | | 1.2 | 1.2 | 1.4 | 1.7 | 1.7 |
| Mean Insertion Loss (dB) | | 1.5 | 1.5 | 1.8 | 2.0 | 2.0 |
| Input Return Loss (dB) | Typ. | 15 | 15 | 14 | 12 | 12 |
| | Min. | 10 | 10 | 10 | 8 | 8 |
| Output Return Loss (dB) | Typ. | 20 | 20 | 18 | 12 | 12 |
| | Min. | 15 | 15 | 12 | 8 | 8 |
| Isolation (dB) | Typ. | 20 | 20 | 20 | 20 | 20 |
| Amplitude Balance (dB) | | ≤ 0.5 | ≤ 0.5 | ≤ 0.5 | ≤ 1.0 | ≤ 1.0 |
| Phase Balance (Φ) | | ≤ 5° | ≤ 5° | ≤ 5° | ≤ 10° | ≤ 10° |

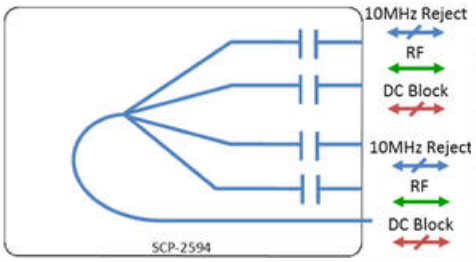
The given Insertion Loss specified is the loss above the theoretical limit for a lossless divider
10MHz Rejection is 20dB*
*To ports which are applicable

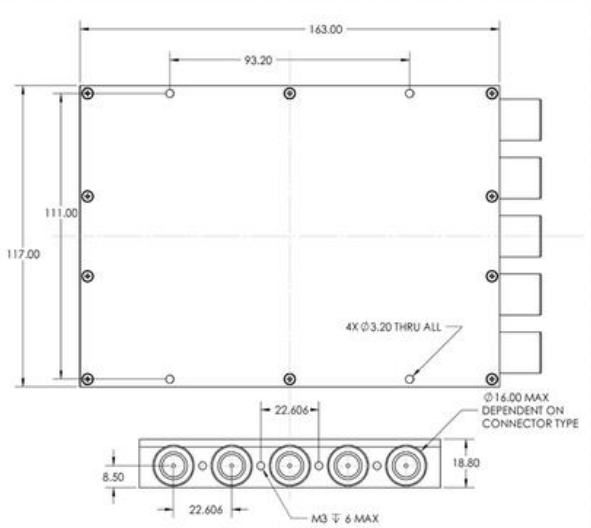
| Max Operating Parameters | |
|---|---|
| Input RF Power | +34 dBm (2.5W) As Splitter / +27dBm (0.5W) As Combiner |
| DC Voltage | 35V on any RF port |
| DC Current | 1 A Max. total Current |

| Environmental | |
|---|---|
| Operating Temperature | 0˚C to +45˚C |
| Storage Temperature | -20˚C to +75˚C |
| Location | Indoor use only |
| Humidity (Max.) | 85% non-condensing |
| Altitude (Max.) | 10,000 feet |

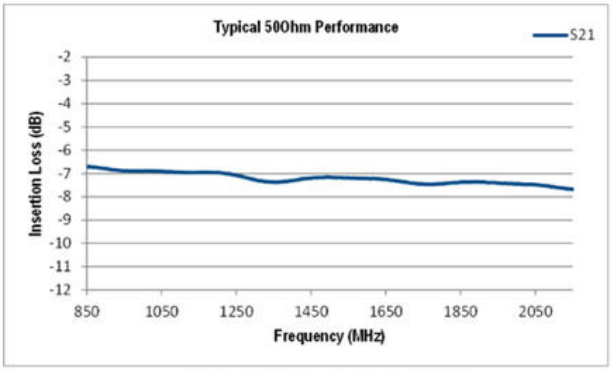
# Diagrams

## Dimensions (mm)

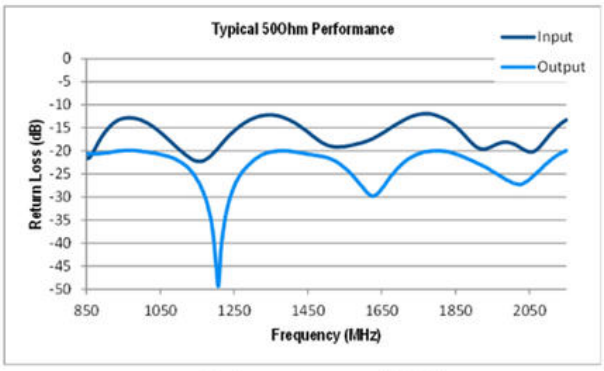



# Test Plots



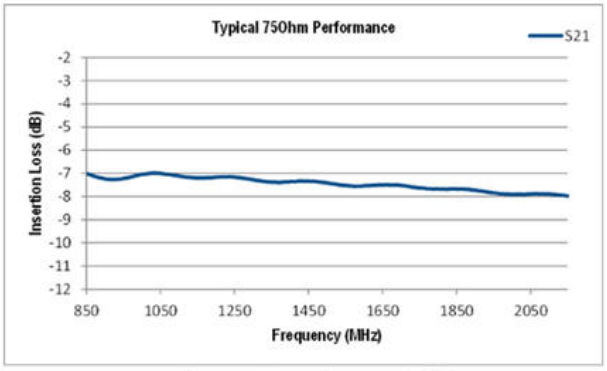

Insertion Loss (dB)



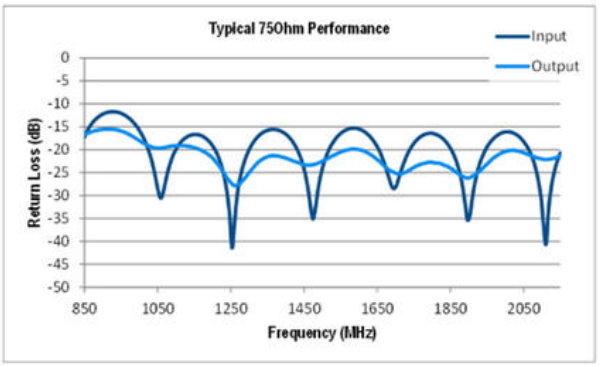

Return Loss (dB)

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.
Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.

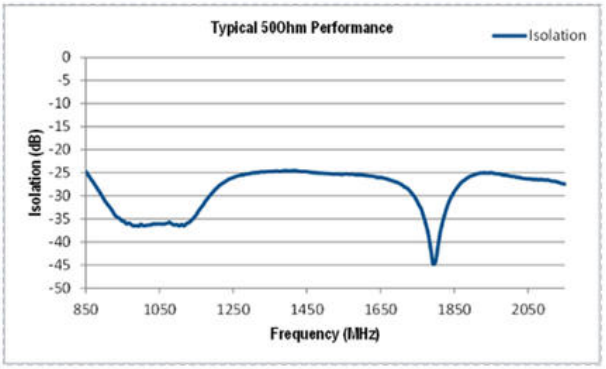
# Test Plots



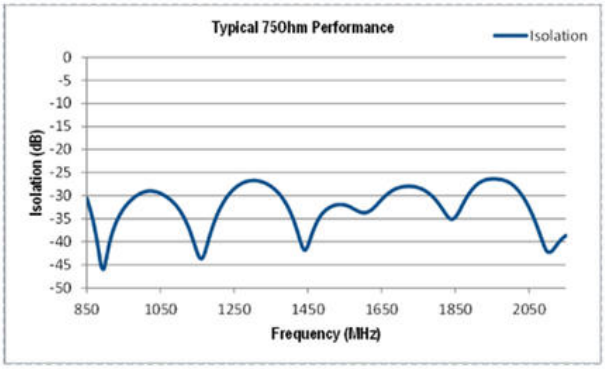

Insertion Loss (dB)




Return Loss (dB)




Isolation (dB)

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