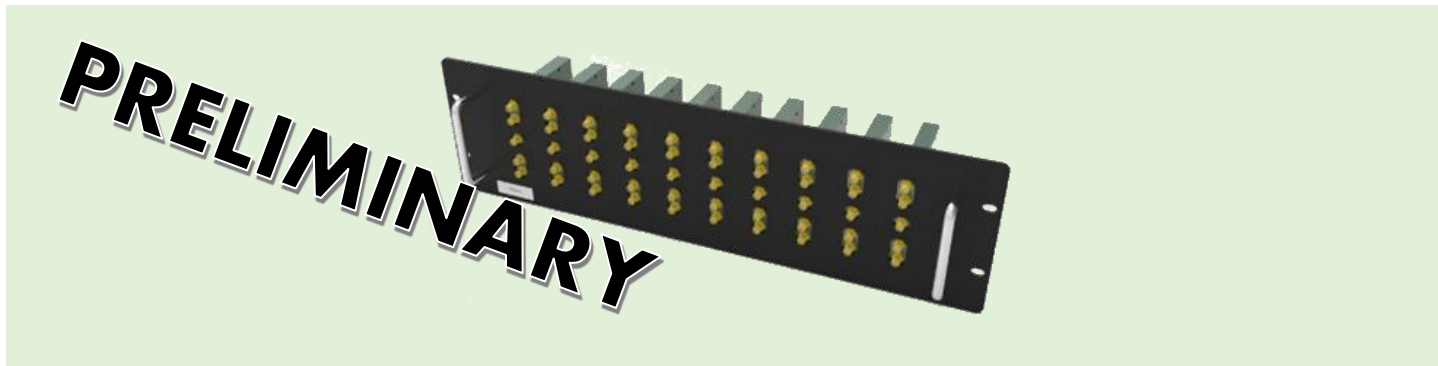


## 10 Count, 1:4 Passive Divider/Combiner, 4U Rack Mount

**WMU-107**



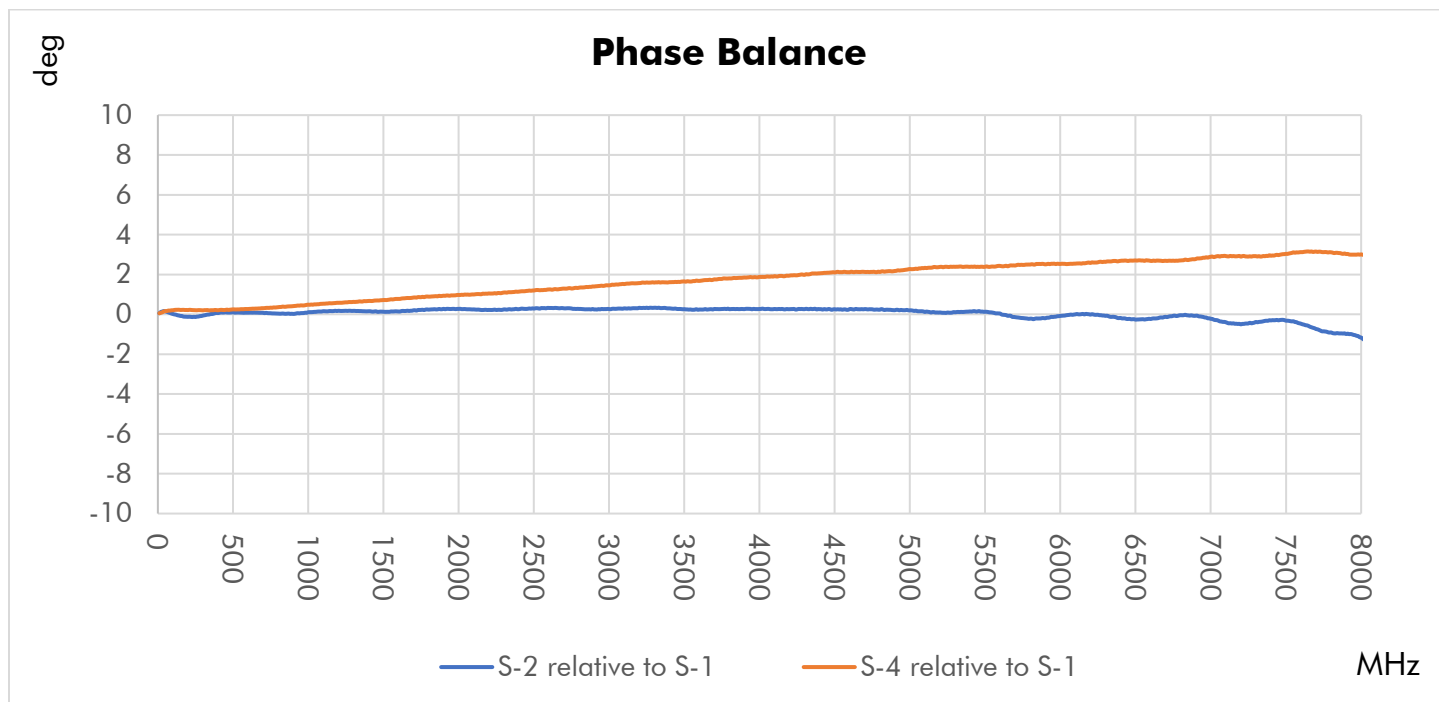
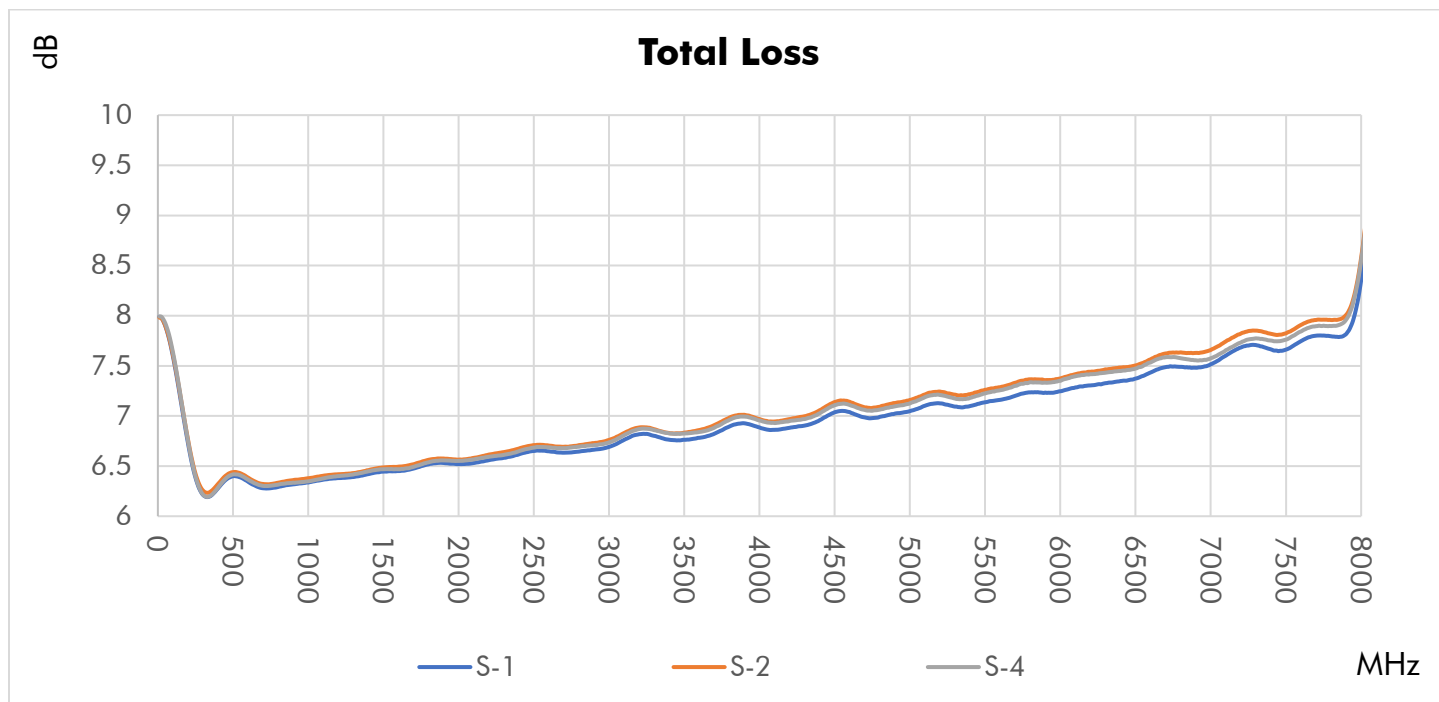
| Parameter                                       | Min.                      | Typ.     | Max.     | Unit     |
|-------------------------------------------------|---------------------------|----------|----------|----------|
| Frequency Range                                 | 600                       |          | 7125     | MHz      |
| Impedance                                       |                           | 50       |          | $\Omega$ |
| Insertion Loss (includes 6dB loss to splitting) |                           | 1.7      | 2.4      | dB       |
| Return Loss (Port S)                            | 600-700MHz<br>700-7125MHz | 11<br>14 | 17<br>19 | dB       |
| Return Loss (Port 1-4)                          |                           | 18       | 21       | dB       |
| Isolation                                       |                           | 18       | 21       | dB       |
| Amplitude Unbalance ( $\pm$ ) <sup>1</sup>      |                           | 0.2      | 0.6      | dB       |
| Phase Unbalance ( $\pm$ ) <sup>1</sup>          |                           | 2.5      | 9.0      | Degrees  |
| Input Power (CW) <sup>2</sup>                   |                           |          | 30       | W        |

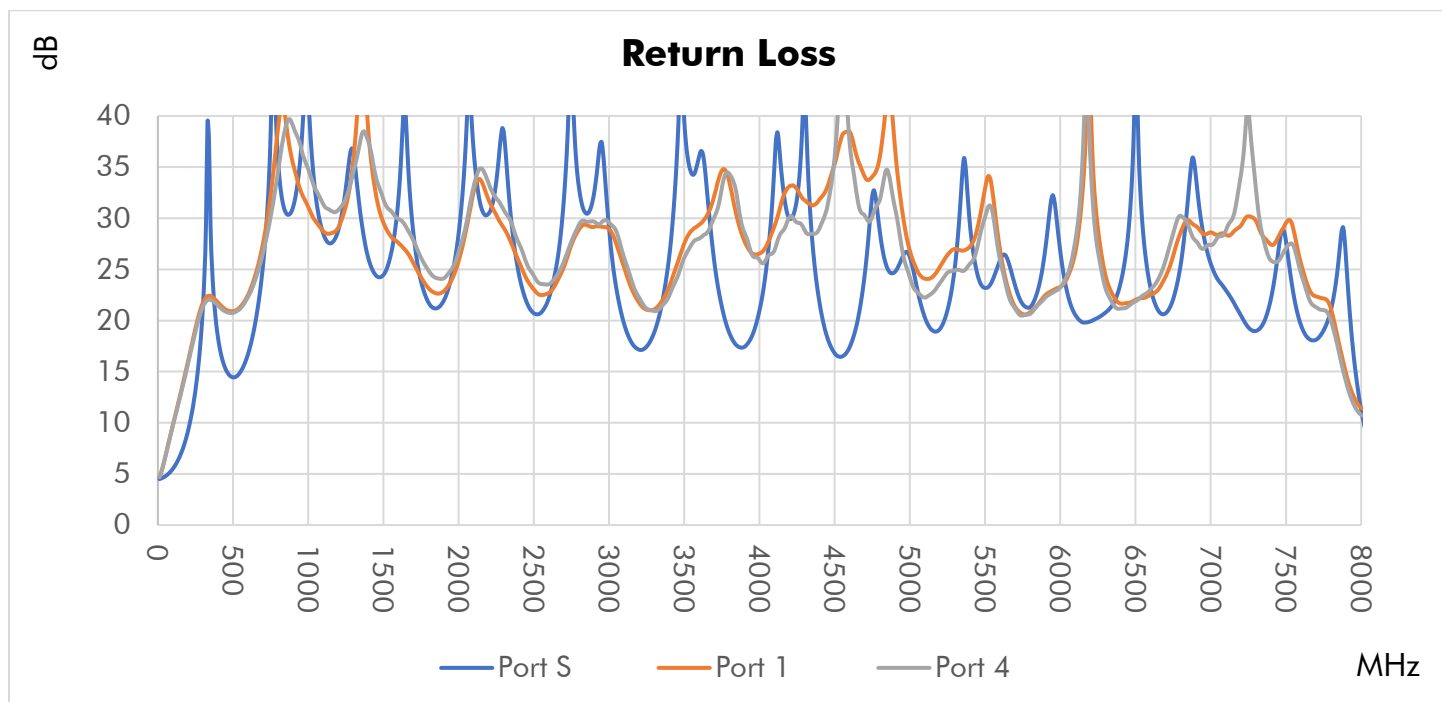
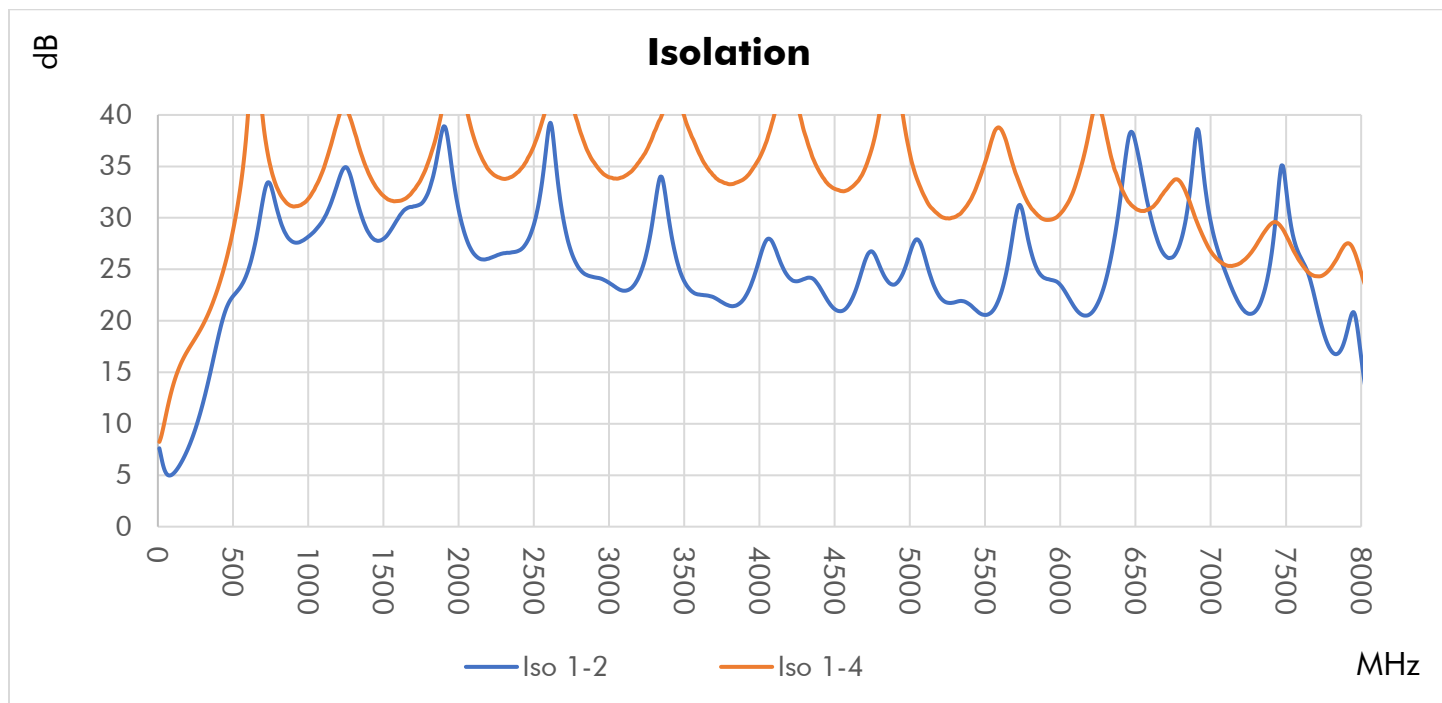
|                                    |                         |
|------------------------------------|-------------------------|
| Connector Interface                | SMA Female              |
| Operating Temperature <sup>3</sup> | -0 to +50 °C            |
| Storage Temperature                | -20 to +60 °C           |
| Nominal Weight                     | 1.9 kg (4.2 lb.)        |
| Operating Humidity                 | 10-90% (non-condensing) |
| Operating Environment              | Indoor Use Only         |
| HTSUS Code                         | 8548.00.0000            |
| ECCN                               | EAR99                   |

|                           |                               |
|---------------------------|-------------------------------|
| RoHS Status <sup>4</sup>  | RoHS3 Compliant               |
| REACH Status <sup>4</sup> | REACH Unaffected              |
| Enclosure Material        | Aluminum/Steel                |
| Connectors Material       | Brass, Gold Plated            |
| Contacts Material         | Beryllium Copper, Gold Plated |
| Insulators Material       | Virgin PTFE                   |
| Finish                    | Black Paint                   |
| Country of Origin         | USA                           |

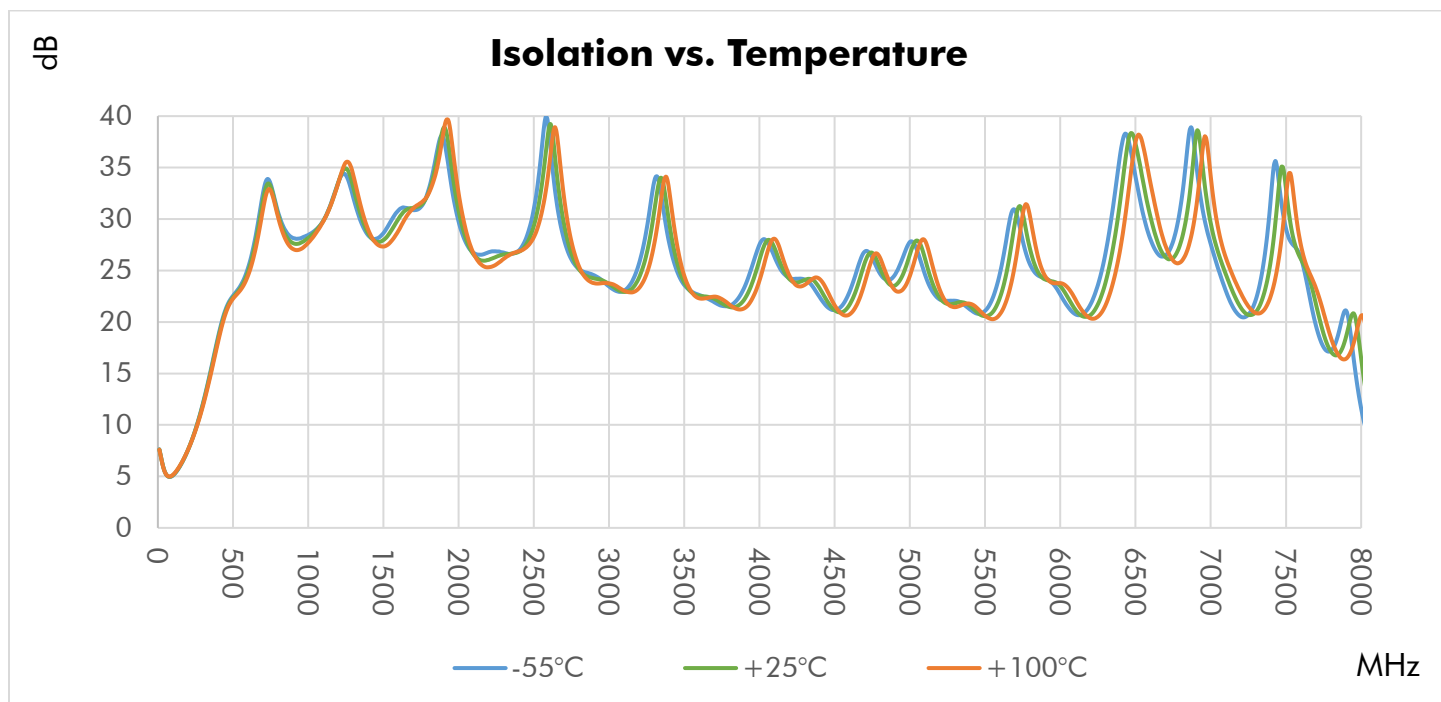
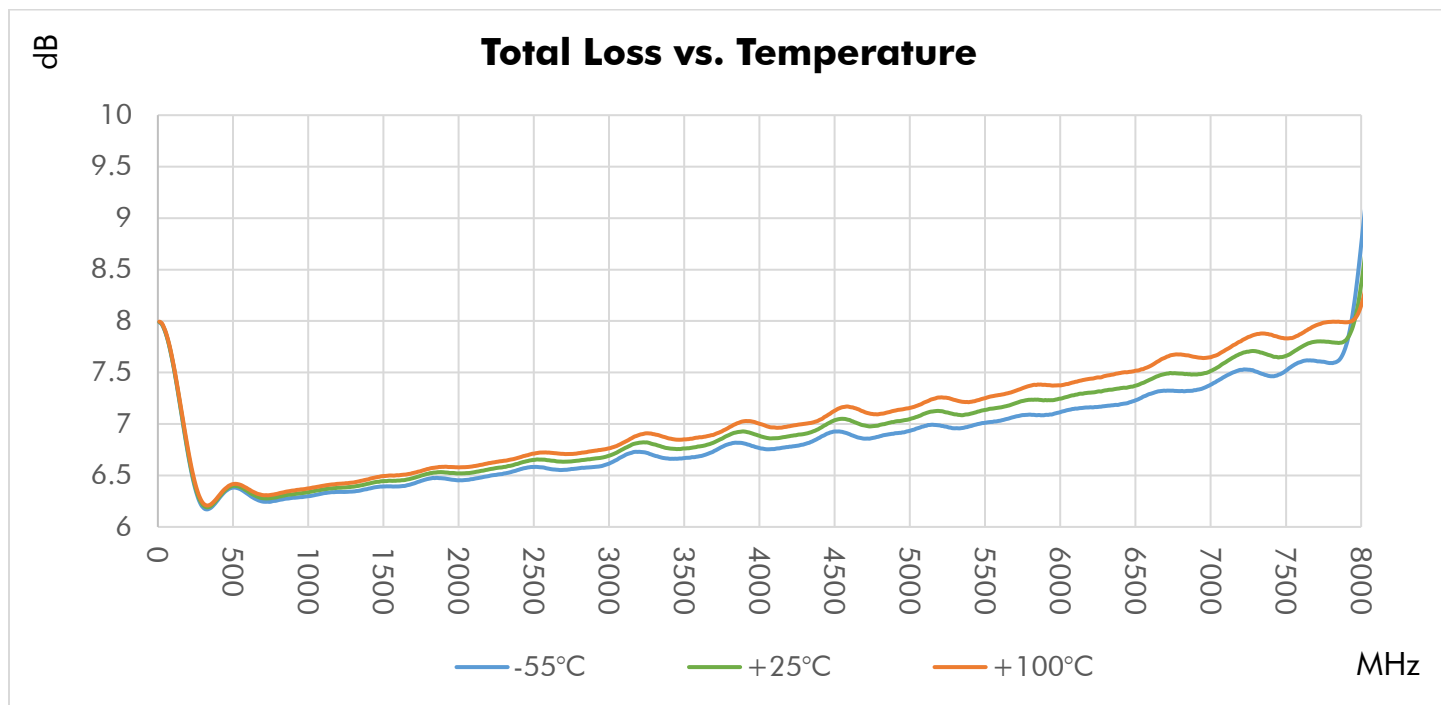
1. With reference to average.
2. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
3. Electrical specifications are tested at +25 °C.
4. To the best of our knowledge at the time of publication.

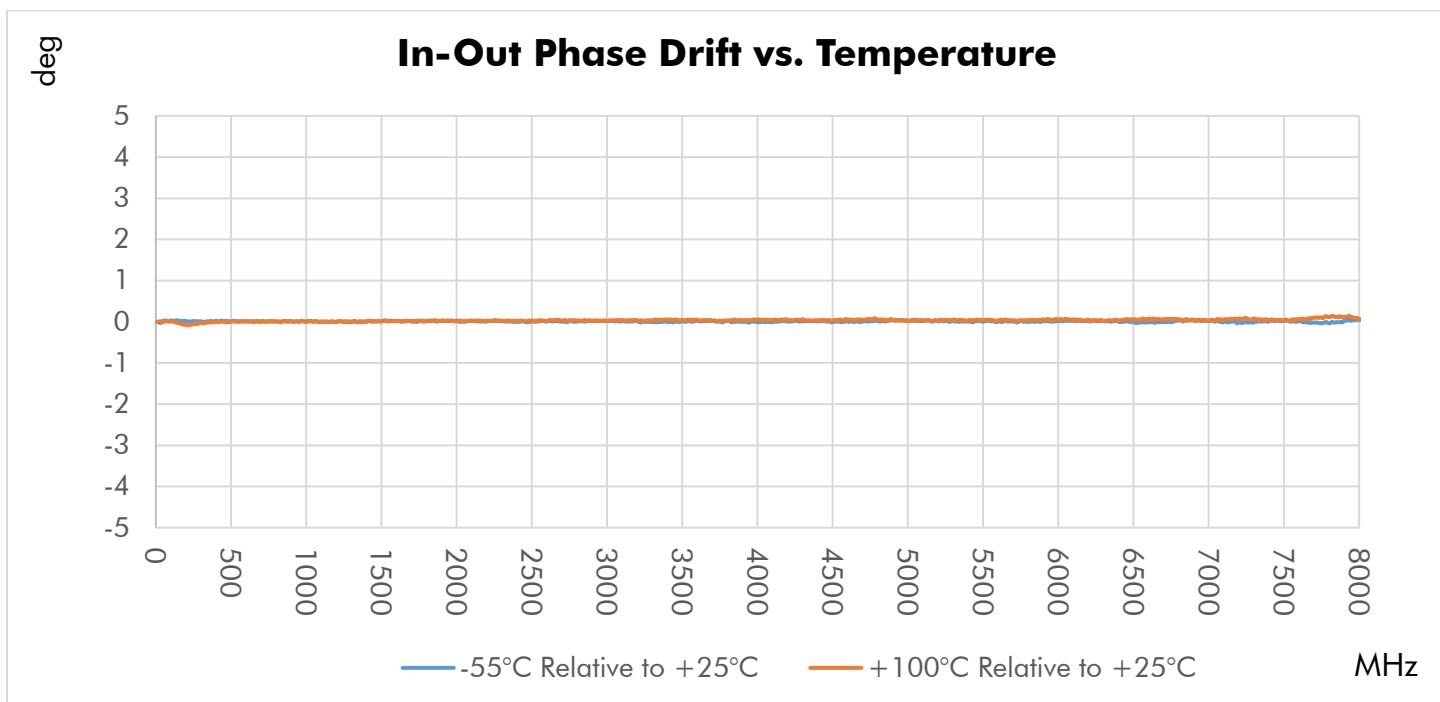
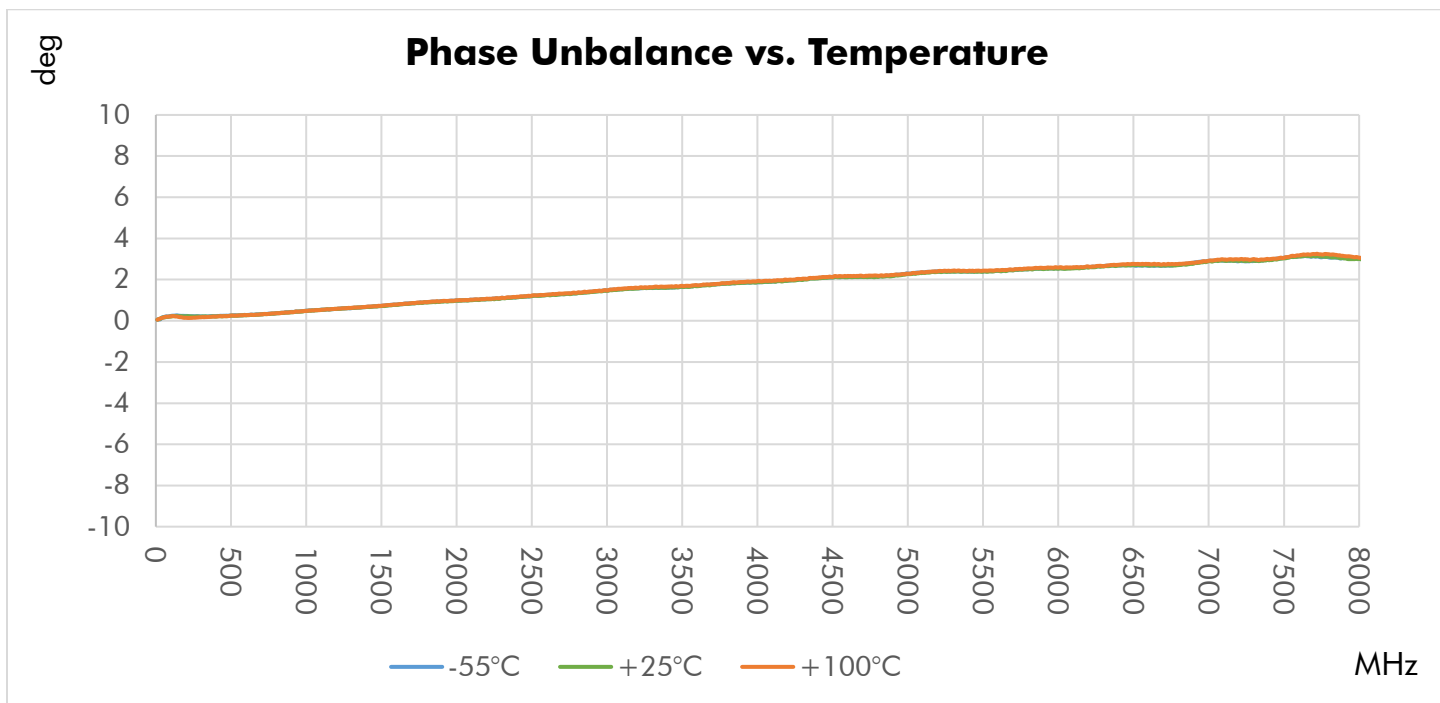
## Typical Performance at +25 °C (Individual Units)

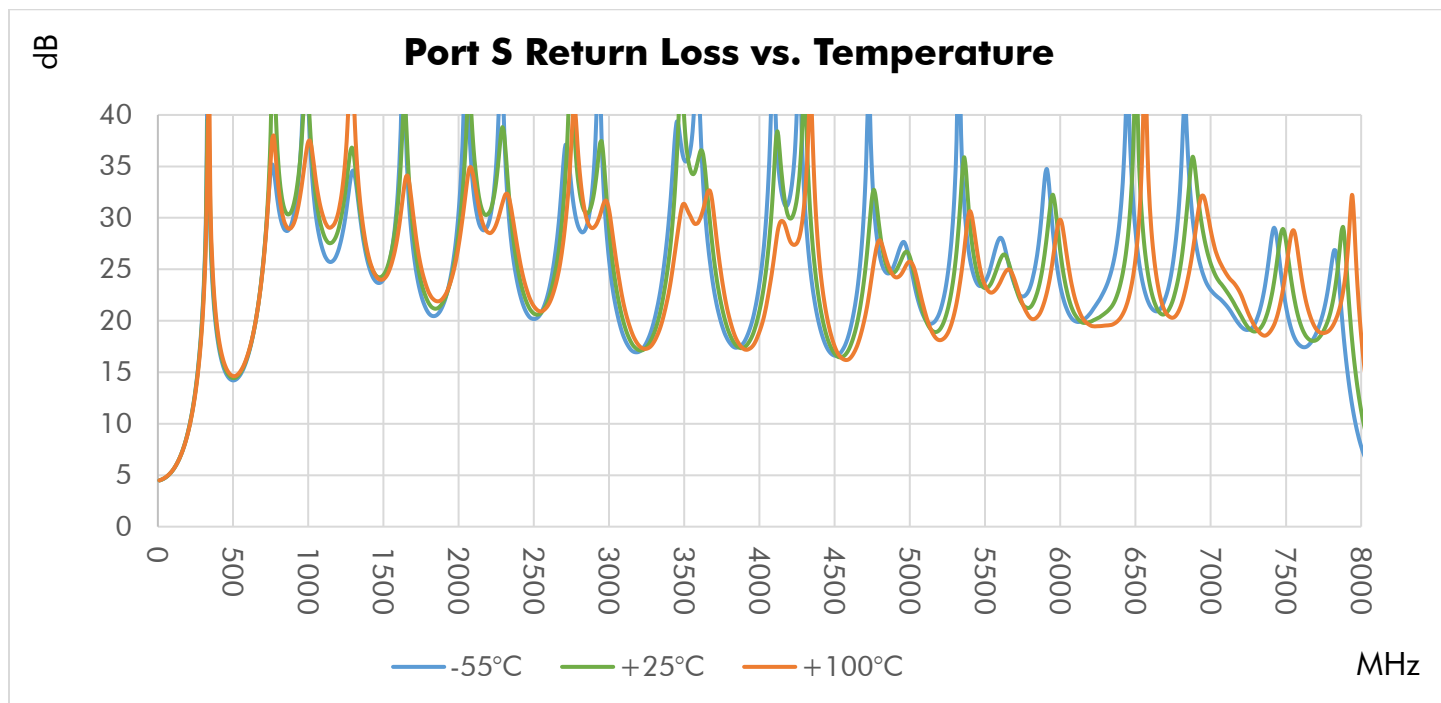




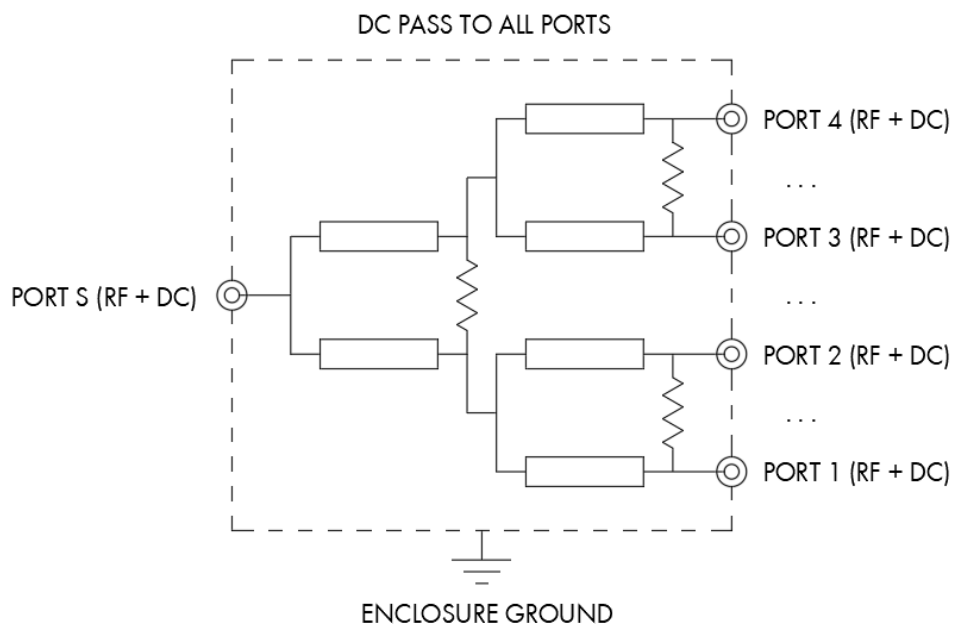
## Typical Performance Over Temperature







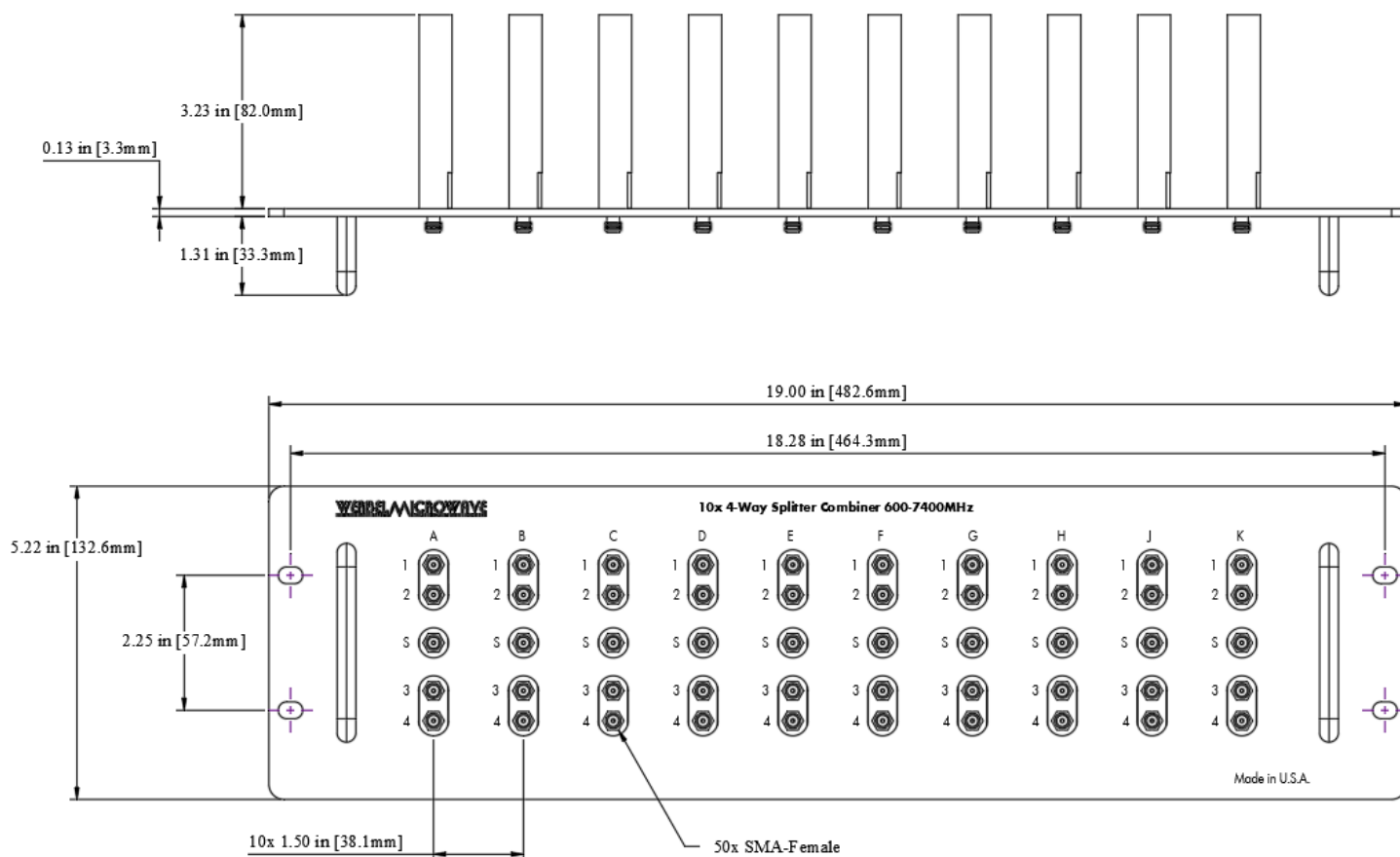
## Simplified Electrical Schematic



## Typical Performance Data

| Frequency<br>(MHz) | Total Loss<br>(dB) |     | Amplitude<br>Unbalance<br>(dB) | Isolation<br>(dB) | Phase<br>Unbalance<br>(deg.) | Return Loss<br>(dB) |        |        |
|--------------------|--------------------|-----|--------------------------------|-------------------|------------------------------|---------------------|--------|--------|
|                    | S-1                | S-4 |                                |                   |                              | Port S              | Port 1 | Port 4 |
| 500                | 6.4                | 6.4 | 0.02                           | 22.1              | 0.0                          | 14.9                | 21.0   | 14.9   |
| 700                | 6.3                | 6.4 | 0.01                           | 34.5              | 0.3                          | 27.8                | 27.7   | 27.9   |
| 900                | 6.4                | 6.4 | 0.01                           | 27.5              | 0.2                          | 28.3                | 35.1   | 28.3   |
| 1100               | 6.4                | 6.4 | 0.02                           | 28.3              | 0.1                          | 26.1                | 28.8   | 26.1   |
| 1300               | 6.4                | 6.5 | 0.02                           | 32.0              | 0.2                          | 32.6                | 34.1   | 32.6   |
| 1500               | 6.5                | 6.5 | 0.02                           | 26.9              | 0.1                          | 24.3                | 30.9   | 24.2   |
| 1700               | 6.5                | 6.5 | 0.01                           | 28.3              | 0.1                          | 24.9                | 25.4   | 24.8   |
| 1900               | 6.6                | 6.6 | 0.00                           | 38.7              | 0.2                          | 22.7                | 23.3   | 22.8   |
| 2100               | 6.6                | 6.6 | 0.01                           | 26.0              | 0.2                          | 31.4                | 32.7   | 31.4   |
| 2300               | 6.6                | 6.7 | 0.02                           | 24.3              | 0.2                          | 28.8                | 30.2   | 28.8   |
| 2500               | 6.7                | 6.7 | 0.02                           | 29.1              | 0.2                          | 20.5                | 23.1   | 20.5   |
| 2700               | 6.7                | 6.7 | 0.02                           | 30.7              | 0.2                          | 32.3                | 25.3   | 32.4   |
| 2900               | 6.7                | 6.7 | 0.01                           | 22.5              | 0.2                          | 32.7                | 34.0   | 32.8   |
| 3100               | 6.8                | 6.8 | 0.01                           | 22.1              | 0.4                          | 19.4                | 25.3   | 19.4   |
| 3300               | 6.9                | 6.9 | 0.03                           | 27.9              | 0.3                          | 19.6                | 20.9   | 19.6   |
| 3500               | 6.8                | 6.9 | 0.02                           | 24.0              | 0.3                          | 29.0                | 25.2   | 29.0   |
| 3700               | 6.9                | 6.9 | 0.01                           | 21.7              | 0.3                          | 25.5                | 32.6   | 25.4   |
| 3900               | 7.0                | 7.0 | 0.02                           | 21.5              | 0.4                          | 20.2                | 30.5   | 20.2   |
| 4100               | 7.0                | 7.0 | 0.03                           | 27.8              | 0.3                          | 23.5                | 25.8   | 23.6   |
| 4300               | 7.0                | 7.0 | 0.03                           | 23.7              | 0.3                          | 30.8                | 29.9   | 30.7   |
| 4500               | 7.1                | 7.1 | 0.03                           | 21.6              | 0.3                          | 20.6                | 32.8   | 20.6   |
| 4700               | 7.1                | 7.1 | 0.03                           | 23.3              | 0.5                          | 19.8                | 33.7   | 19.8   |
| 4900               | 7.1                | 7.1 | 0.05                           | 23.9              | 0.4                          | 32.0                | 32.0   | 32.2   |
| 5100               | 7.1                | 7.2 | 0.05                           | 27.8              | 0.5                          | 24.0                | 22.0   | 23.9   |
| 5300               | 7.2                | 7.3 | 0.06                           | 20.5              | 0.5                          | 18.7                | 26.0   | 18.7   |
| 5500               | 7.2                | 7.3 | 0.06                           | 20.5              | 0.6                          | 30.5                | 29.7   | 30.5   |
| 5700               | 7.3                | 7.3 | 0.06                           | 24.3              | 0.7                          | 25.4                | 22.4   | 25.6   |
| 5900               | 7.4                | 7.4 | 0.06                           | 24.5              | 0.8                          | 19.6                | 19.8   | 19.7   |
| 6100               | 7.3                | 7.4 | 0.07                           | 21.3              | 0.6                          | 29.6                | 26.2   | 29.9   |
| 6300               | 7.4                | 7.5 | 0.08                           | 21.5              | 0.4                          | 18.9                | 27.2   | 18.9   |
| 6500               | 7.5                | 7.6 | 0.06                           | 30.2              | 0.5                          | 19.0                | 19.8   | 18.9   |
| 6700               | 7.5                | 7.6 | 0.06                           | 27.5              | 0.3                          | 30.5                | 24.6   | 30.7   |
| 6900               | 7.6                | 7.7 | 0.07                           | 28.5              | 0.2                          | 21.1                | 30.4   | 21.1   |
| 7100               | 7.6                | 7.7 | 0.05                           | 21.9              | 0.3                          | 22.6                | 23.5   | 22.7   |
| 7300               | 7.7                | 7.8 | 0.06                           | 21.8              | 0.6                          | 30.0                | 29.7   | 30.0   |
| 7500               | 7.9                | 7.9 | 0.05                           | 27.4              | 0.7                          | 15.8                | 29.1   | 15.8   |
| 7700               | 7.9                | 7.9 | 0.07                           | 20.6              | 0.9                          | 19.6                | 25.3   | 19.6   |
| 7900               | 7.9                | 8.0 | 0.06                           | 18.6              | 0.7                          | 19.8                | 15.2   | 19.8   |

## Outline Dimensions



Outline drawing: OL-U-4-10CT-4974

Dimensions are in inches, [mm] shown for convenience.

Tolerances on 2-pl decimals:  $\pm 0.03$ . 3-pl decimals:  $\pm 0.015$ .

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