

## Power Divider, 4-way, 0.6-7.4GHz, SMA Female, Front Mount

## WM4PD-0.6-7.4-S1

### Description

WM4PD-0.6-7.4-S1 is a 4-way power splitter covering a continuous bandwidth of 600 MHz to 7.4 GHz in an enclosure measuring 3.48 x 3.23 x 0.55 inches. The configuration is unique in that the input and output are on the same side, which allows for front panel mounting in rack systems, and internally where space may be limited. The device is RoHS compliant and is assembled and tested in USA. Especially useful for extended Wi-Fi 7.125GHz Wi-Max testing.



Photo is representative.

| Specifications                | Min. | Typ. | Max. | Units      |
|-------------------------------|------|------|------|------------|
| Frequency                     | 600  | -    | 7400 | MHz        |
| Impedance                     | -    | 50   | -    | Ohm        |
| Return Loss (Port S)          | 11   | 17   | -    | dB         |
| Return Loss (Ports 1-4)       | 13   | 19   | -    | dB         |
| Insertion Loss (above 6.02dB) | -    | 1.7  | 2.4  | dB         |
| Isolation                     | 18   | 20   | -    | dB         |
| Amplitude Balance             | -    | 0.2  | 0.6  | dB         |
| Phase Balance                 | -    | 2.5  | 9.0  | Degrees    |
| Input Power (CW) <sup>1</sup> | -    | -    | 30   | Watts (CW) |

### Mechanical

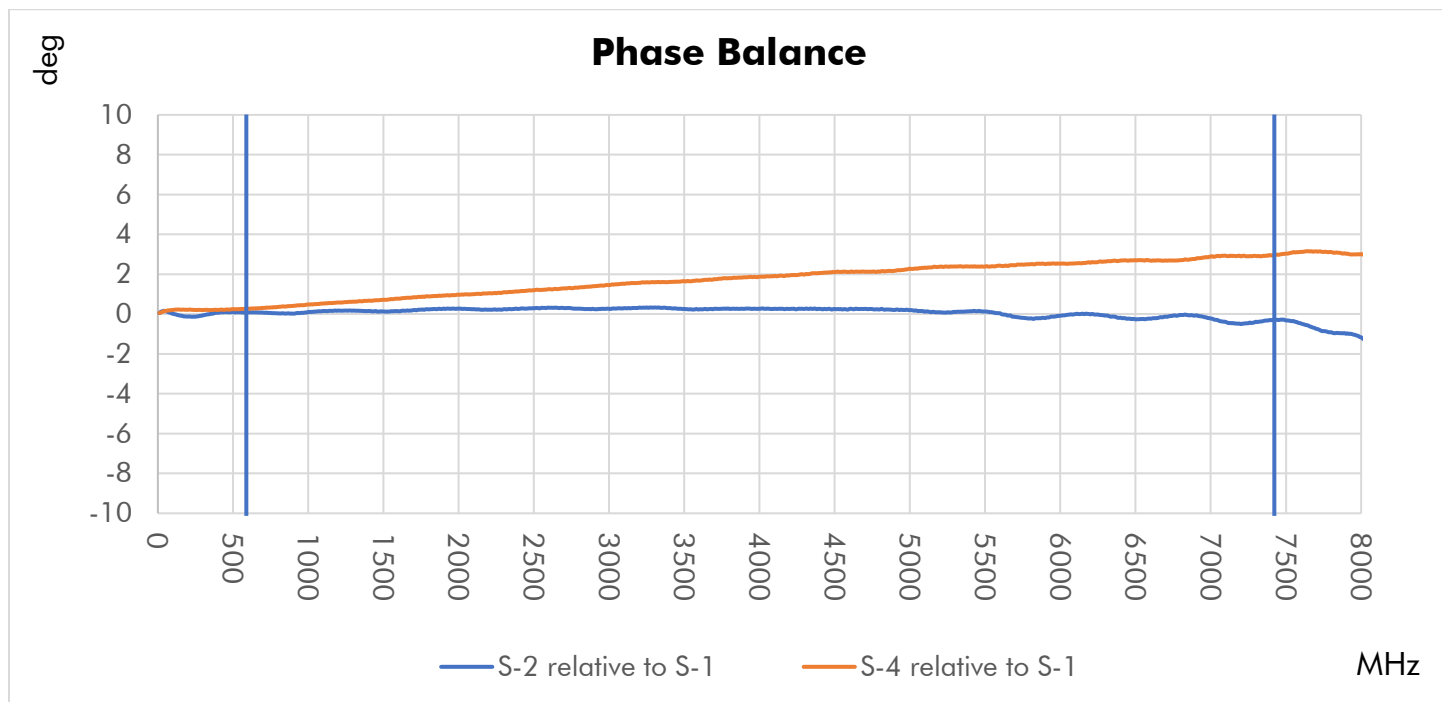
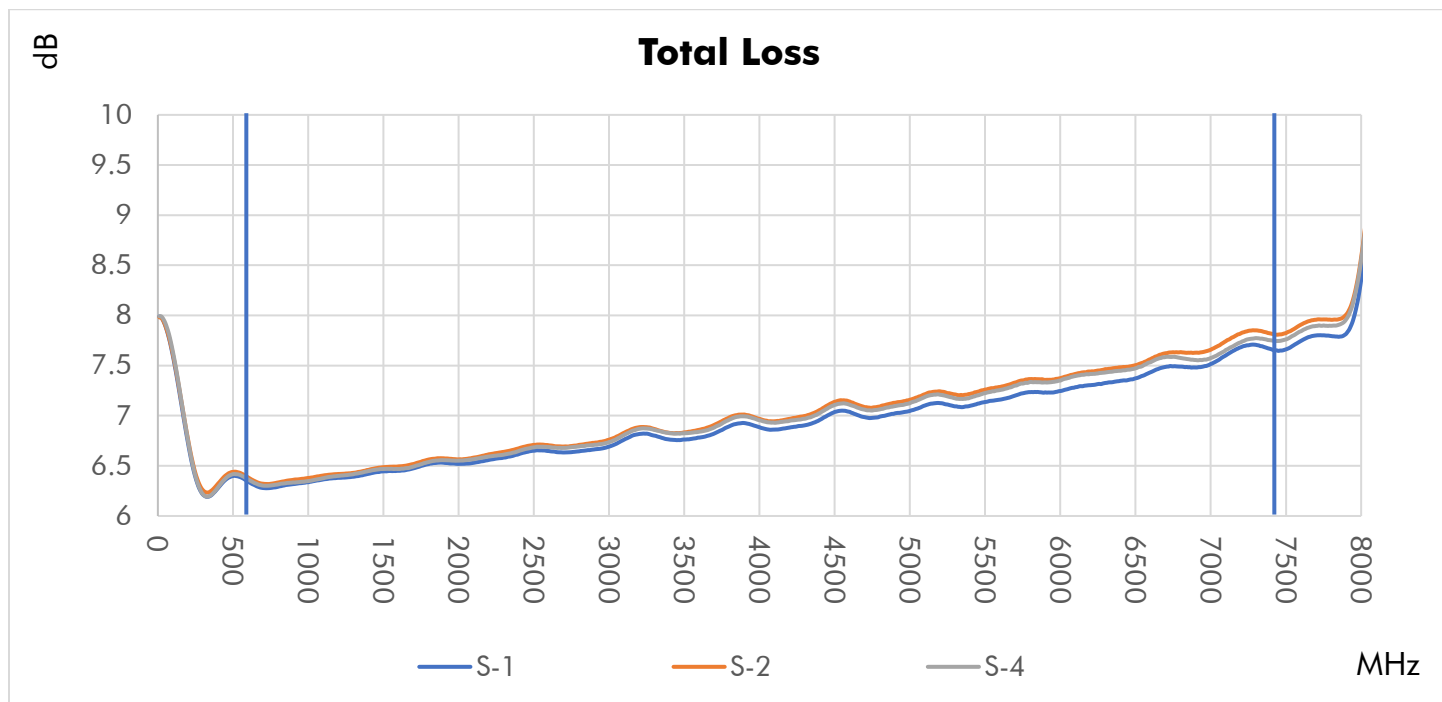
|                                    |                       |
|------------------------------------|-----------------------|
| Connector Interface                | SMA-Female            |
| Operating Temperature <sup>2</sup> | -40 to +85 °C         |
| Storage Temperature                | -55 to +100 °C        |
| Weight Estimate                    | 6 oz (170 g)          |
| Humidity                           | 10-90% non-condensing |
| Environment                        | Indoors Use Only      |

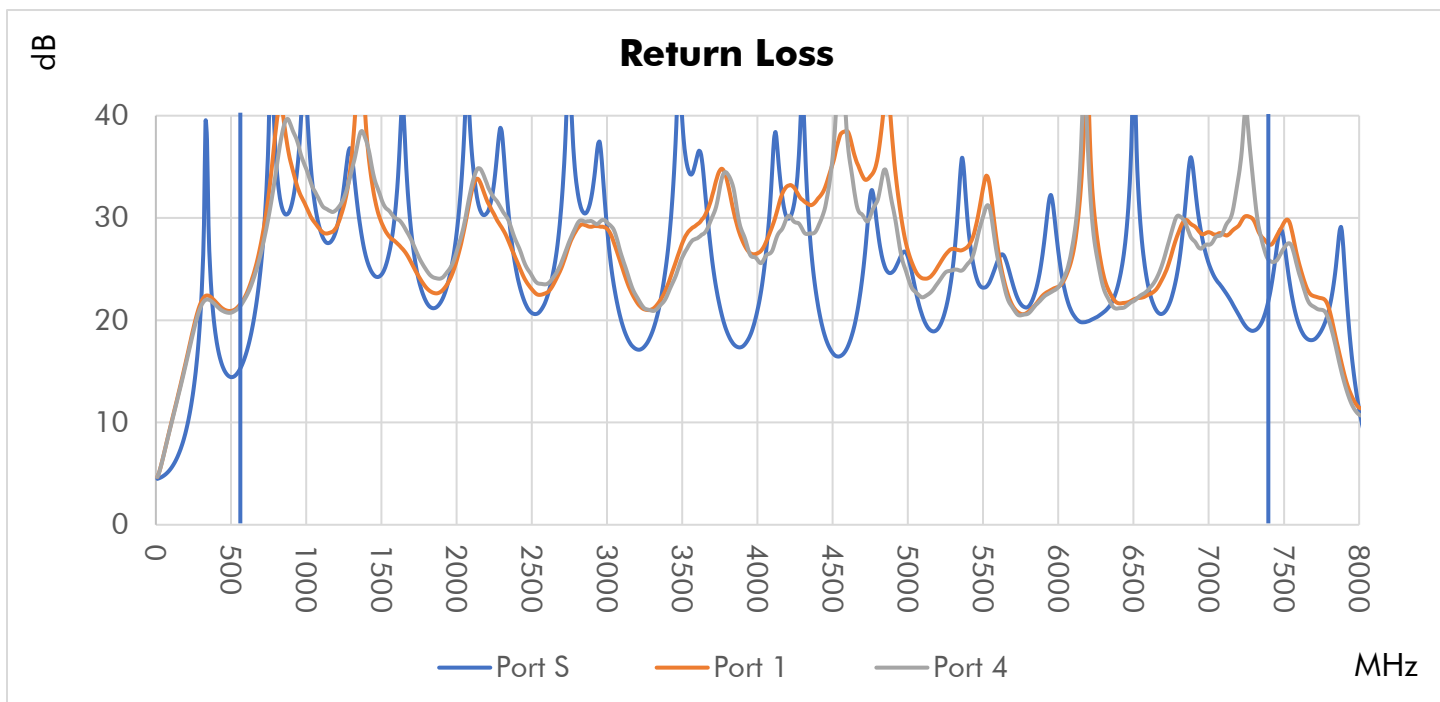
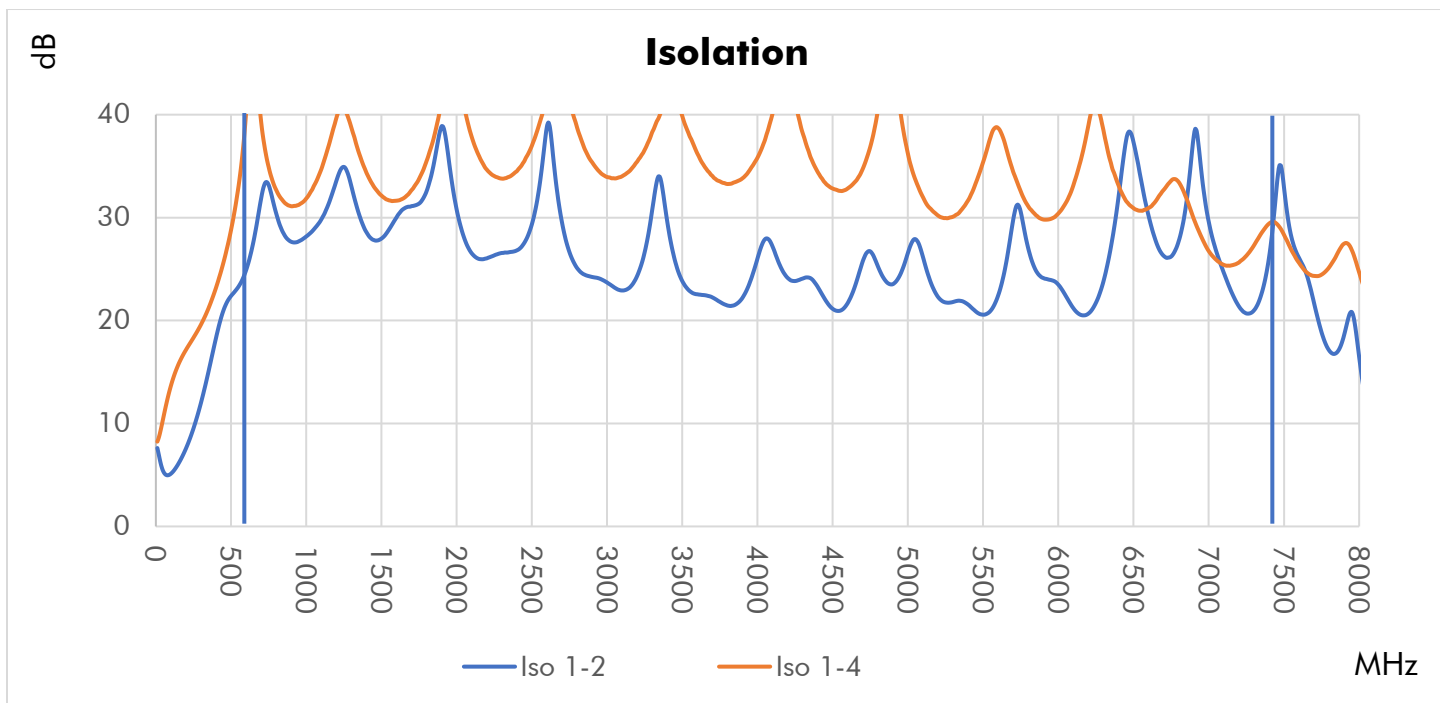
1. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
2. Electrical specifications at +25 °C only.
3. To the best of our knowledge at the time of publication.

### Materials

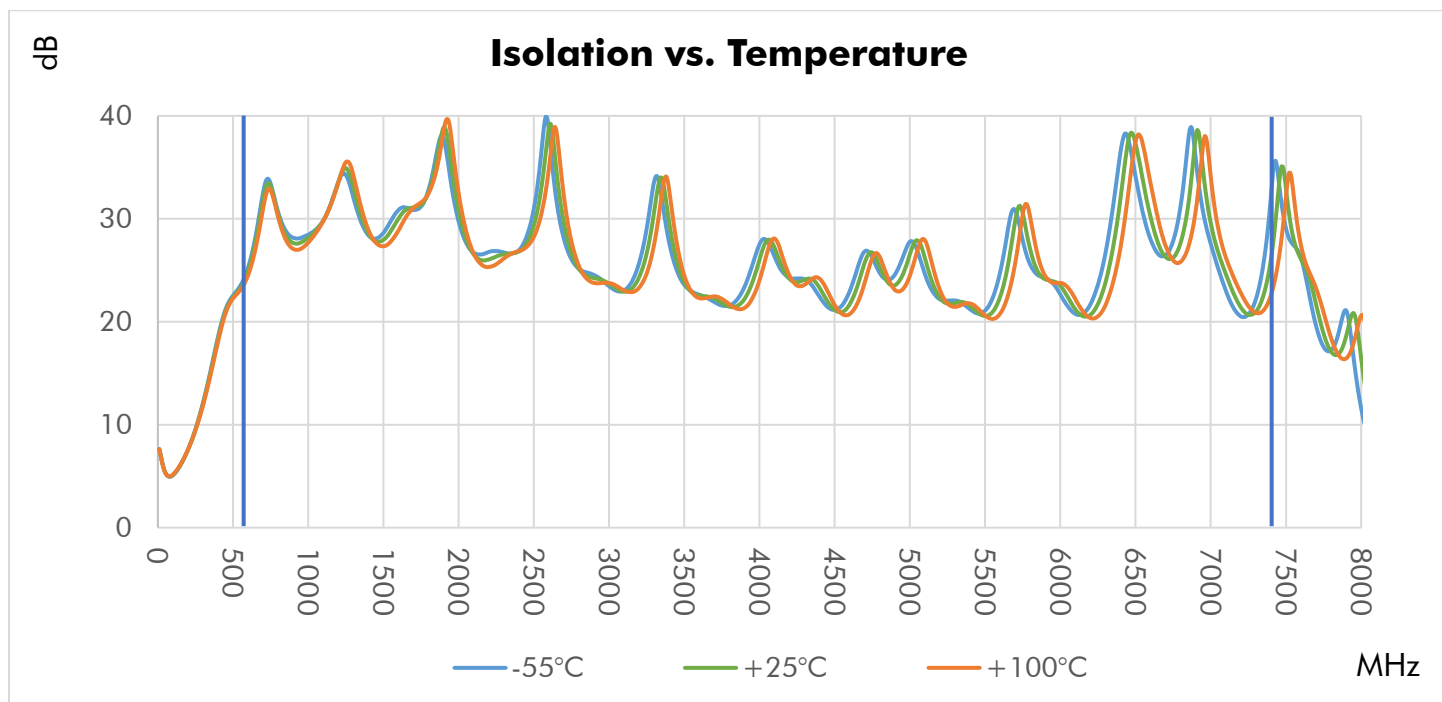
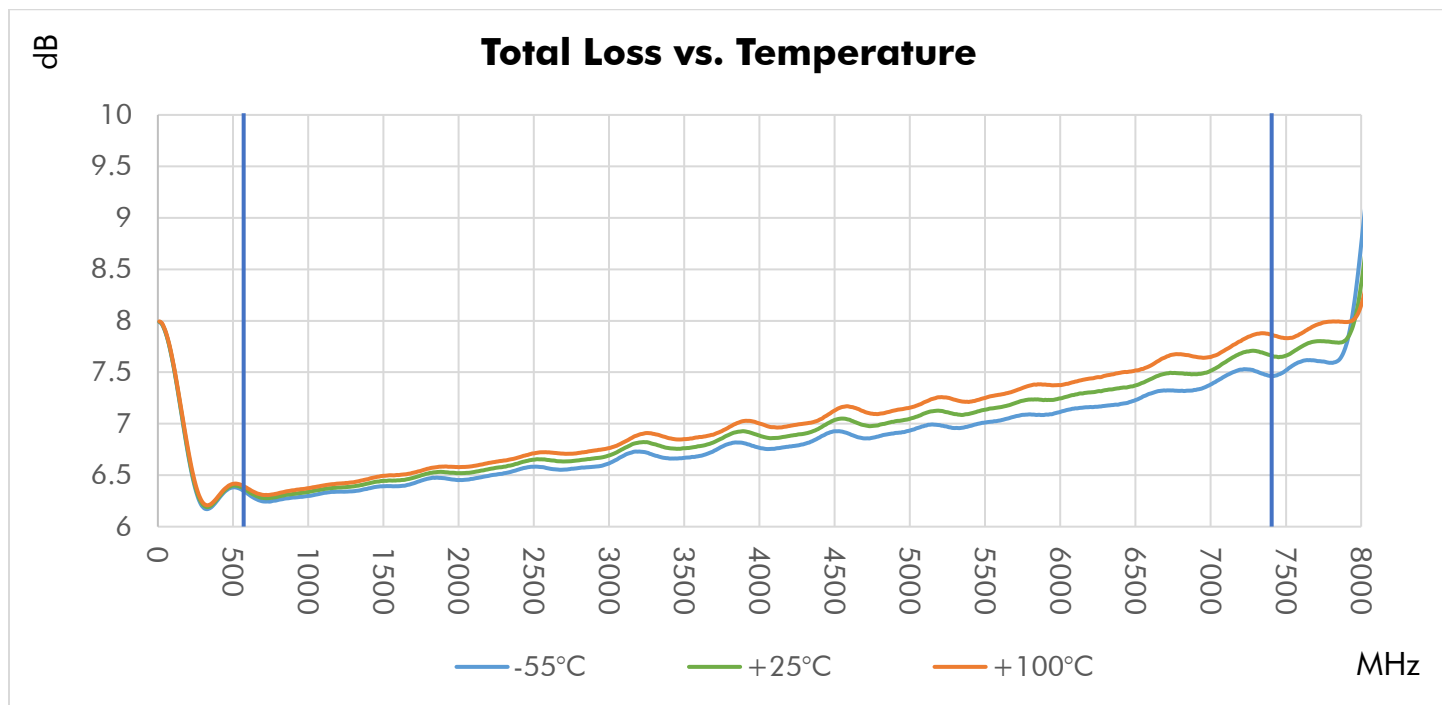
|                             |                    |
|-----------------------------|--------------------|
| RoHS Compliant <sup>3</sup> |                    |
| Enclosure                   | Aluminum           |
| Connectors                  | Brass, Gold Plated |
| Contacts                    | Be Cu, Gold Plated |
| Insulators                  | PTFE               |
| Finish                      | Green Paint        |

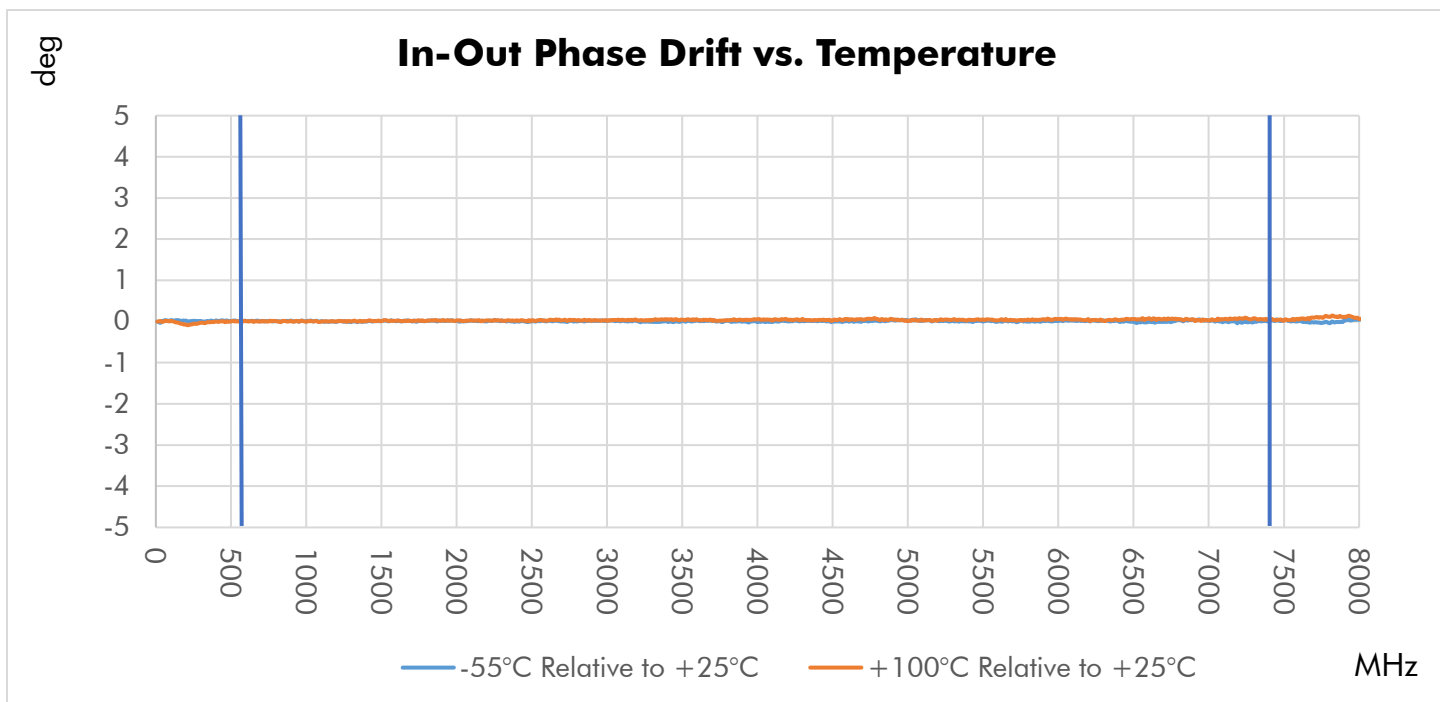
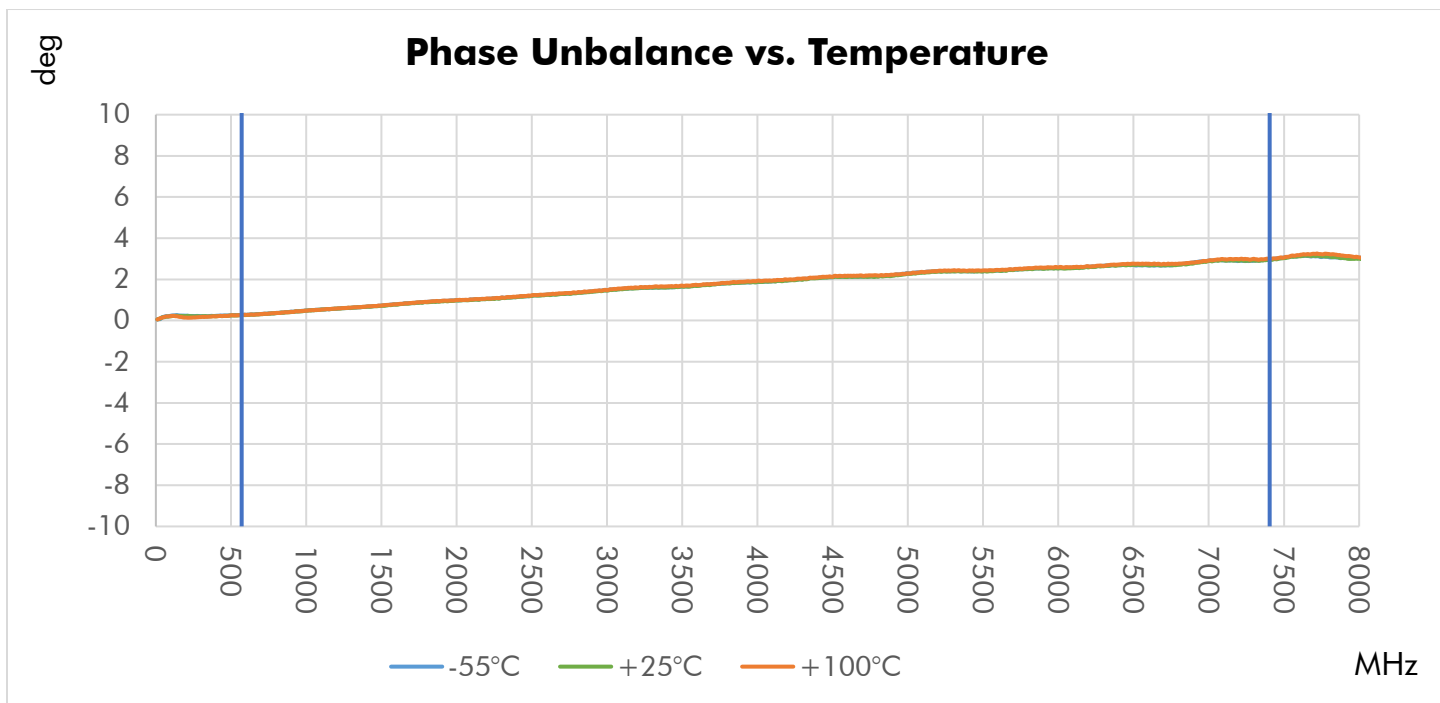
## Typical Performance at +25 °C

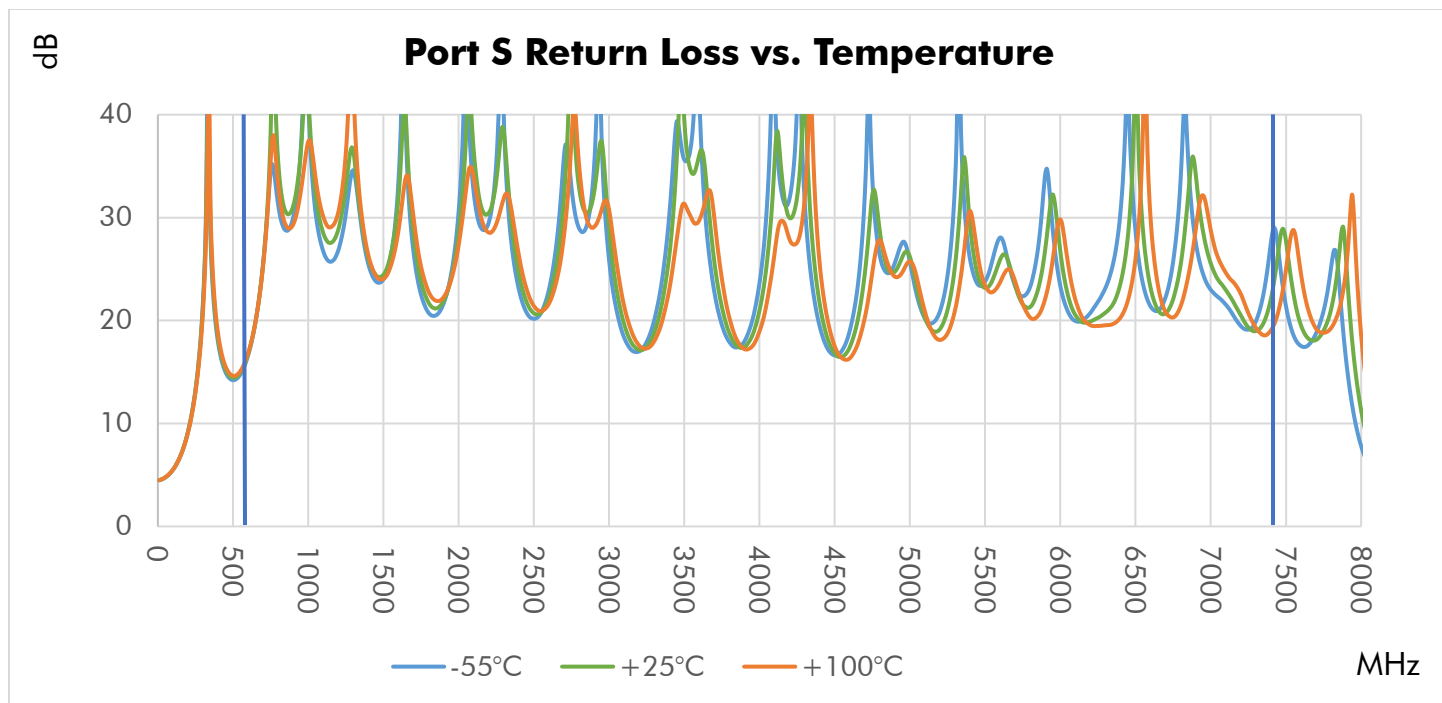




## Typical Performance Over Temperature



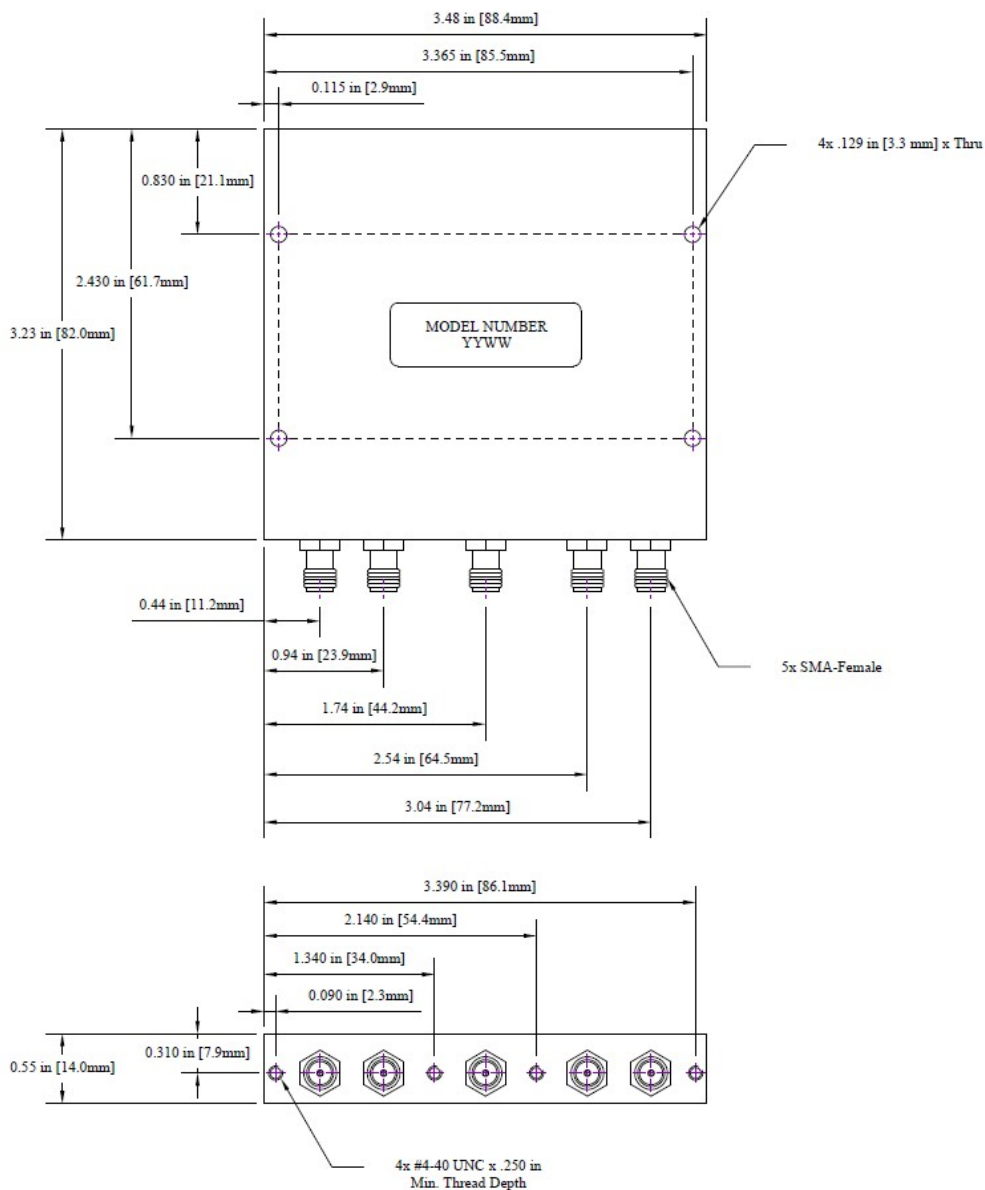




## Typical Performance Data

| 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-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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