

## Power Divider, 4-way, 18-26.5GHz, SMA Female

## ESAT-4PD18265S



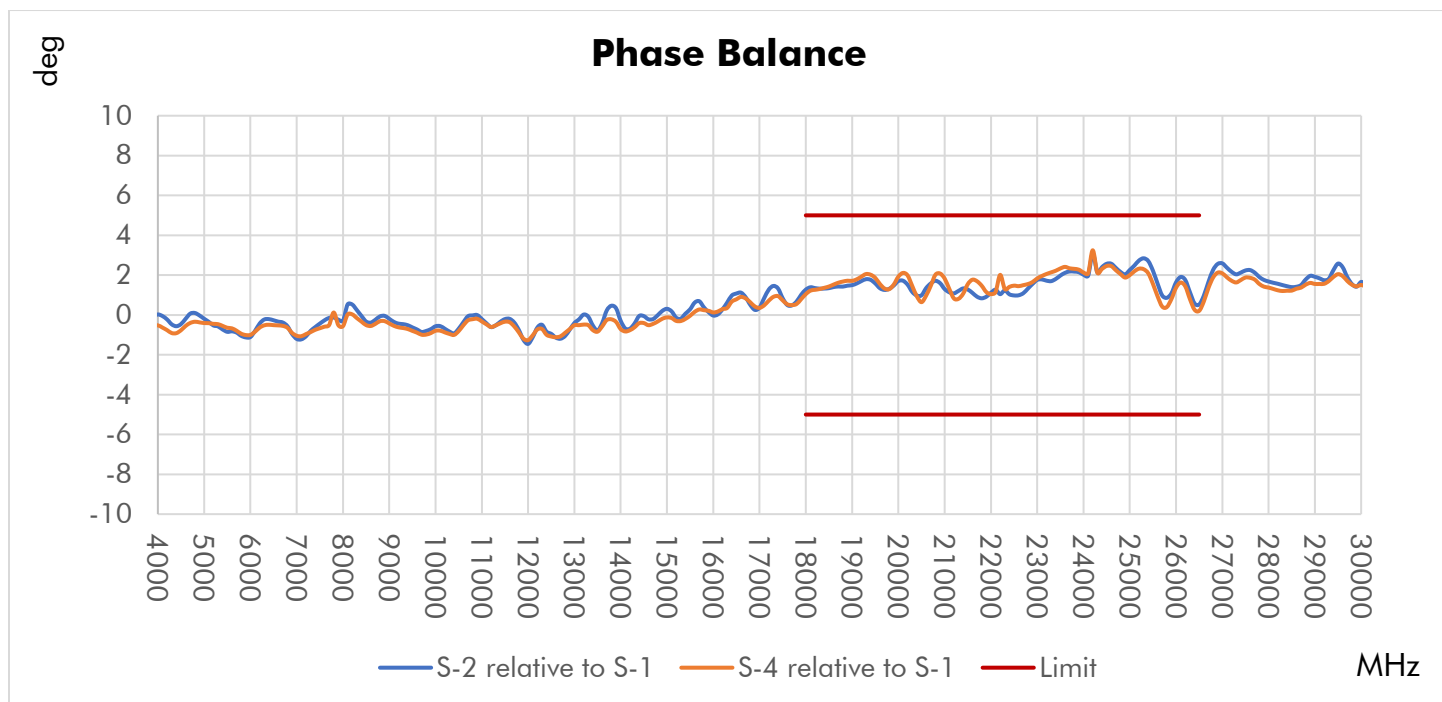
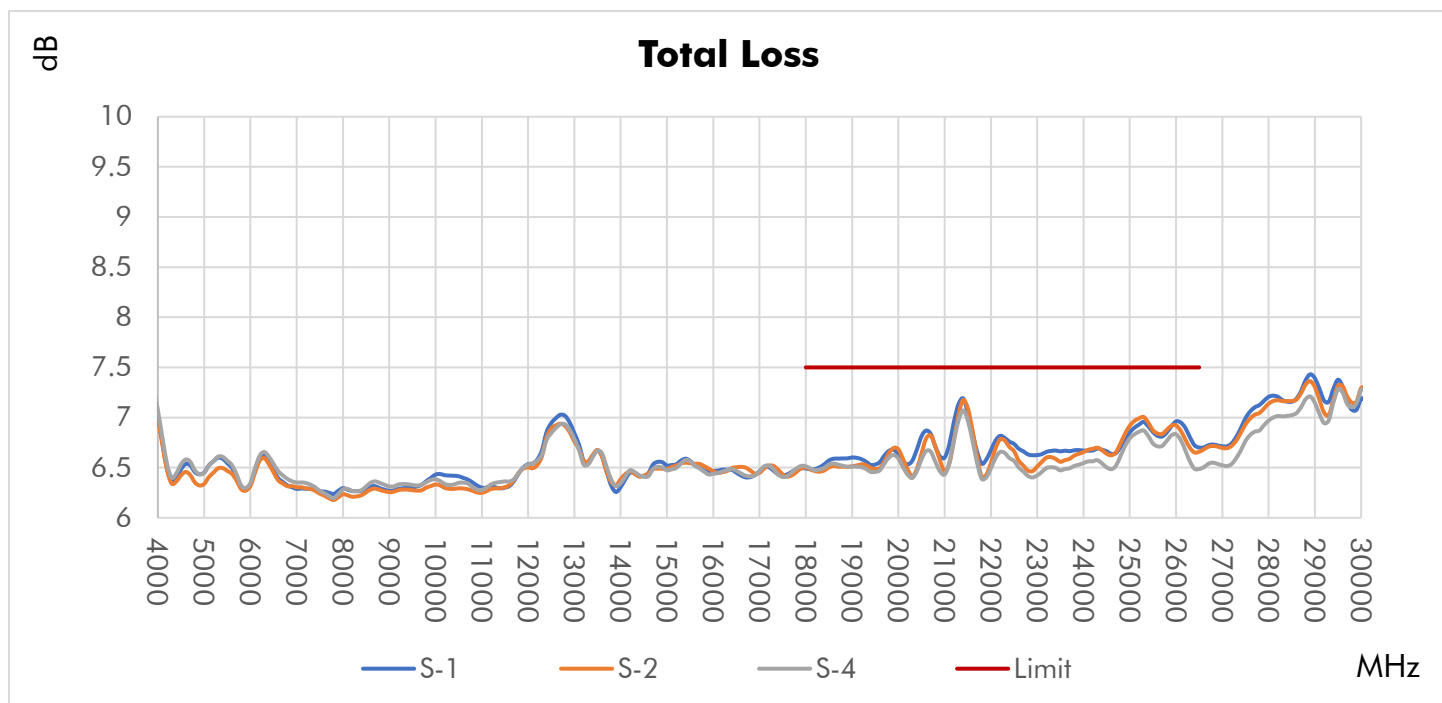
| Parameter                                  | Min.  | Typ. | Max.  | Unit         |
|--------------------------------------------|-------|------|-------|--------------|
| Frequency Range                            | 18000 |      | 26500 | MHz          |
| Impedance                                  |       | 50   |       | $\Omega$     |
| Return Loss (Port S)                       | 12.7  | 15.1 |       | dB, min.     |
| Return Loss (Port 1-2)                     | 13.7  | 15.1 |       | dB, min.     |
| Insertion Loss above 6dB                   |       | 1.2  | 1.5   | dB, max.     |
| Isolation                                  | 17    | 19   |       | dB, min.     |
| Amplitude Unbalance ( $\pm$ ) <sup>1</sup> |       | 0.09 | 0.4   | dB, max.     |
| Phase Unbalance ( $\pm$ ) <sup>1</sup>     |       | 1.5  | 5     | Degree, max. |
| Input Power (CW) <sup>2</sup>              |       | 10   |       | W, max.      |

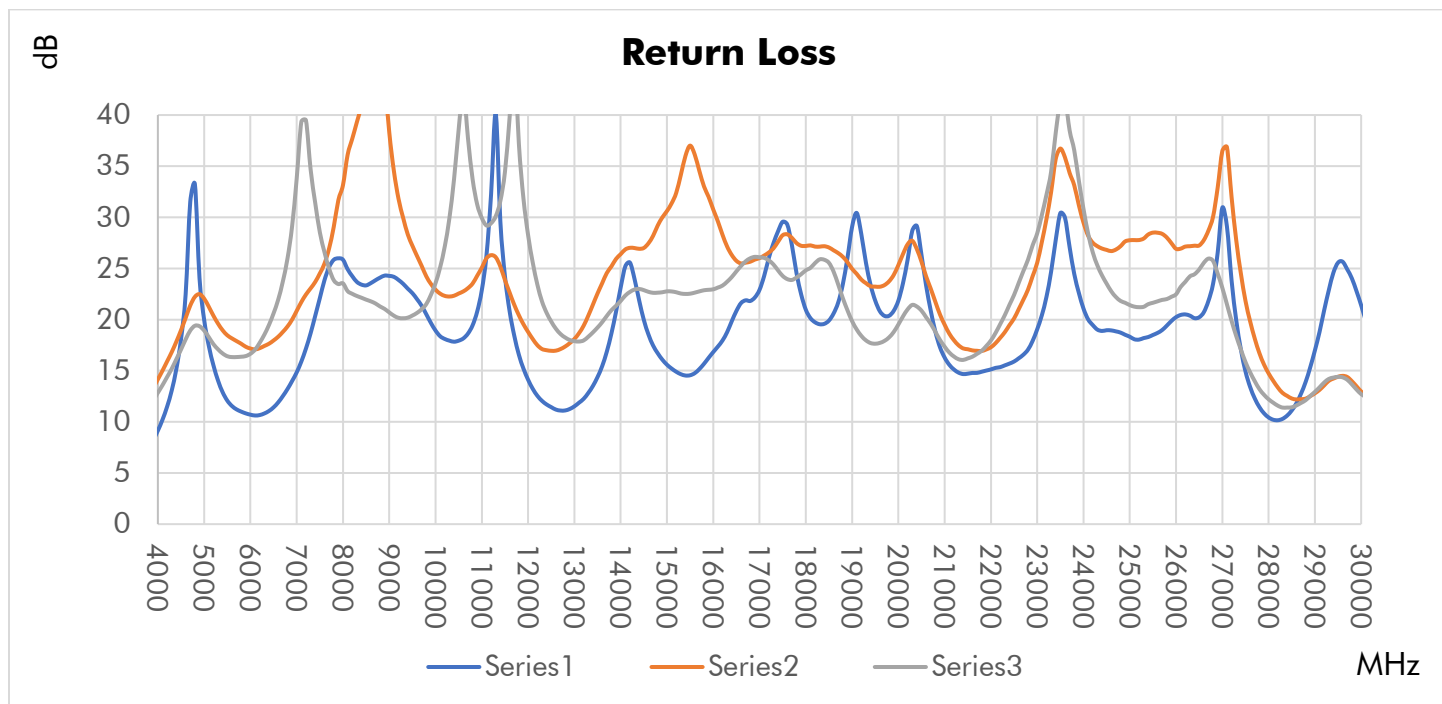
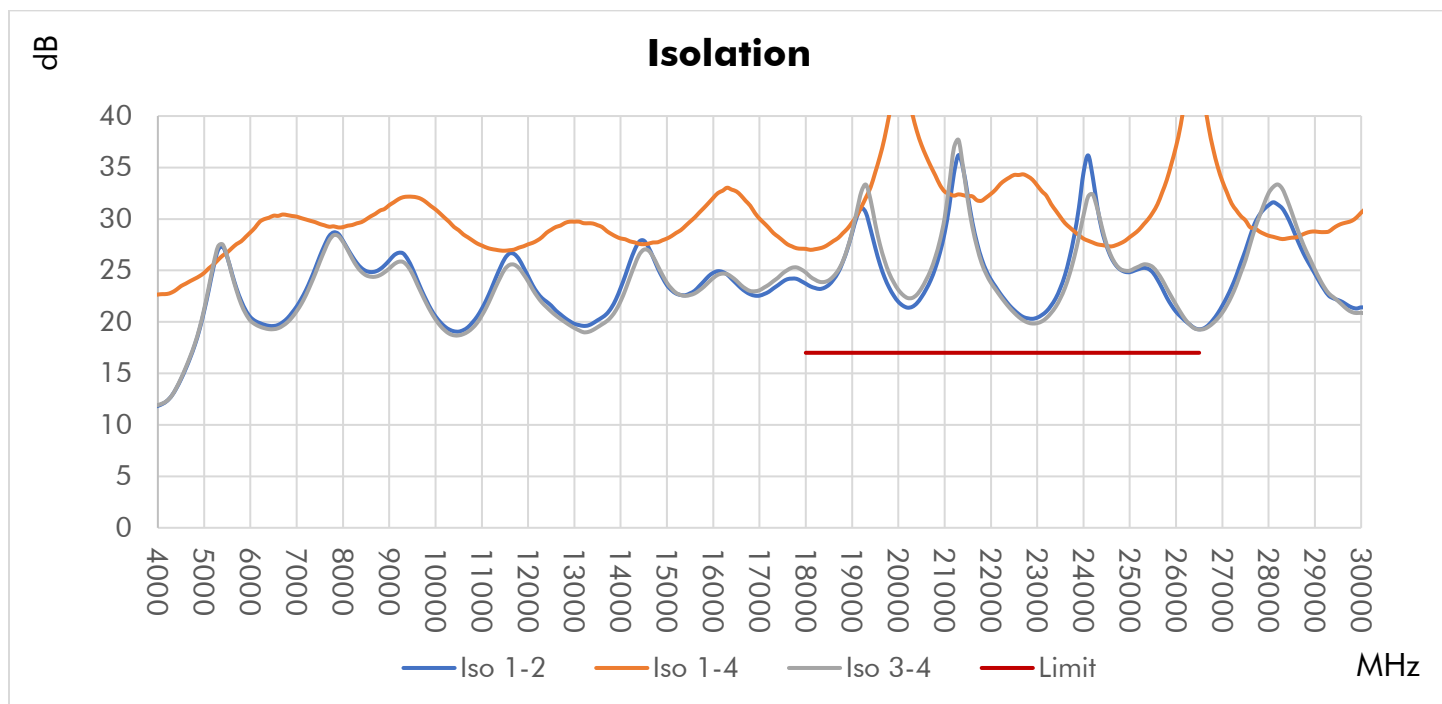
|                                    |                         |
|------------------------------------|-------------------------|
| Connector Interface                | SMA Female              |
| Operating Temperature <sup>3</sup> | -55 to +85 °C           |
| Storage Temperature                | -55 to +100 °C          |
| Nominal Weight                     | 59.2 g (2.09 oz)        |
| 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                      |
| Connectors Material       | Stainless Steel               |
| Contacts Material         | Beryllium Copper, Gold Plated |
| Insulators Material       | Virgin PTFE                   |
| Finish                    | Green Paint                   |
| Country of Origin         | United States of America      |

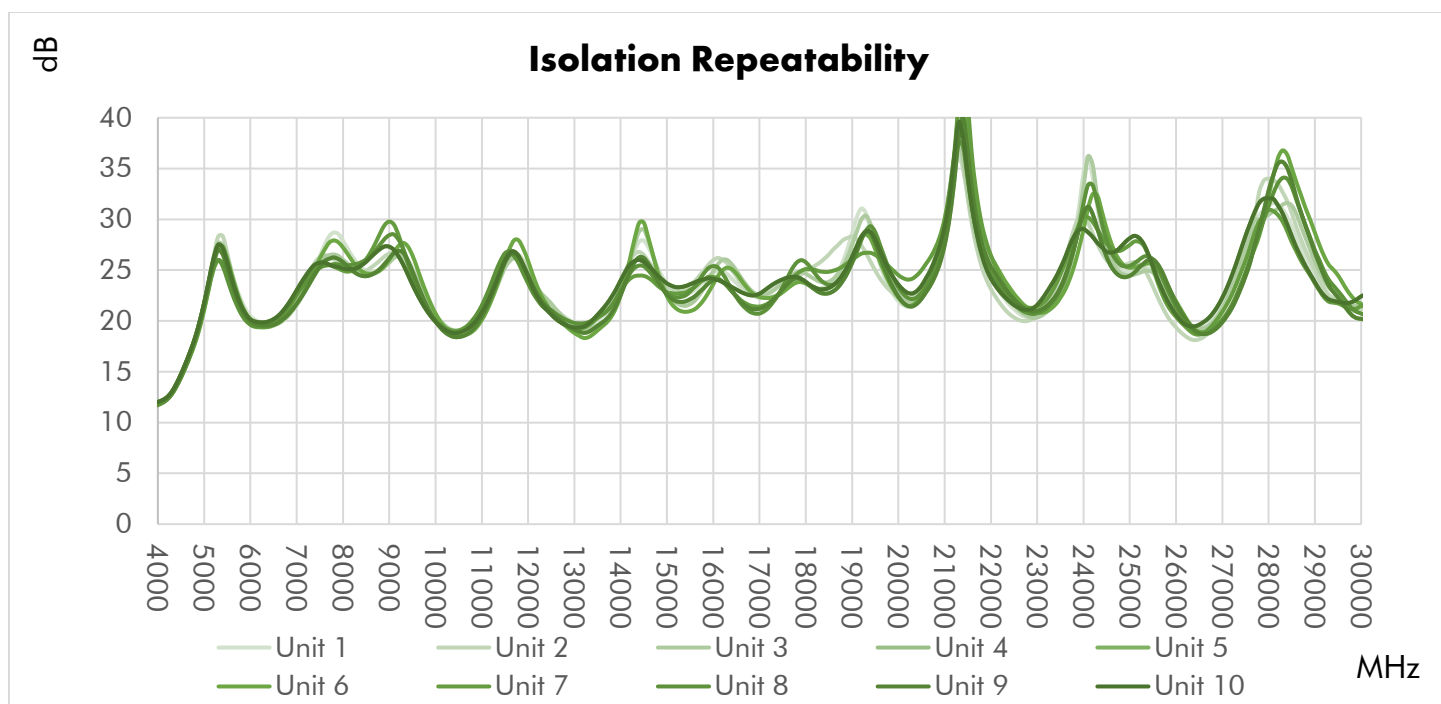
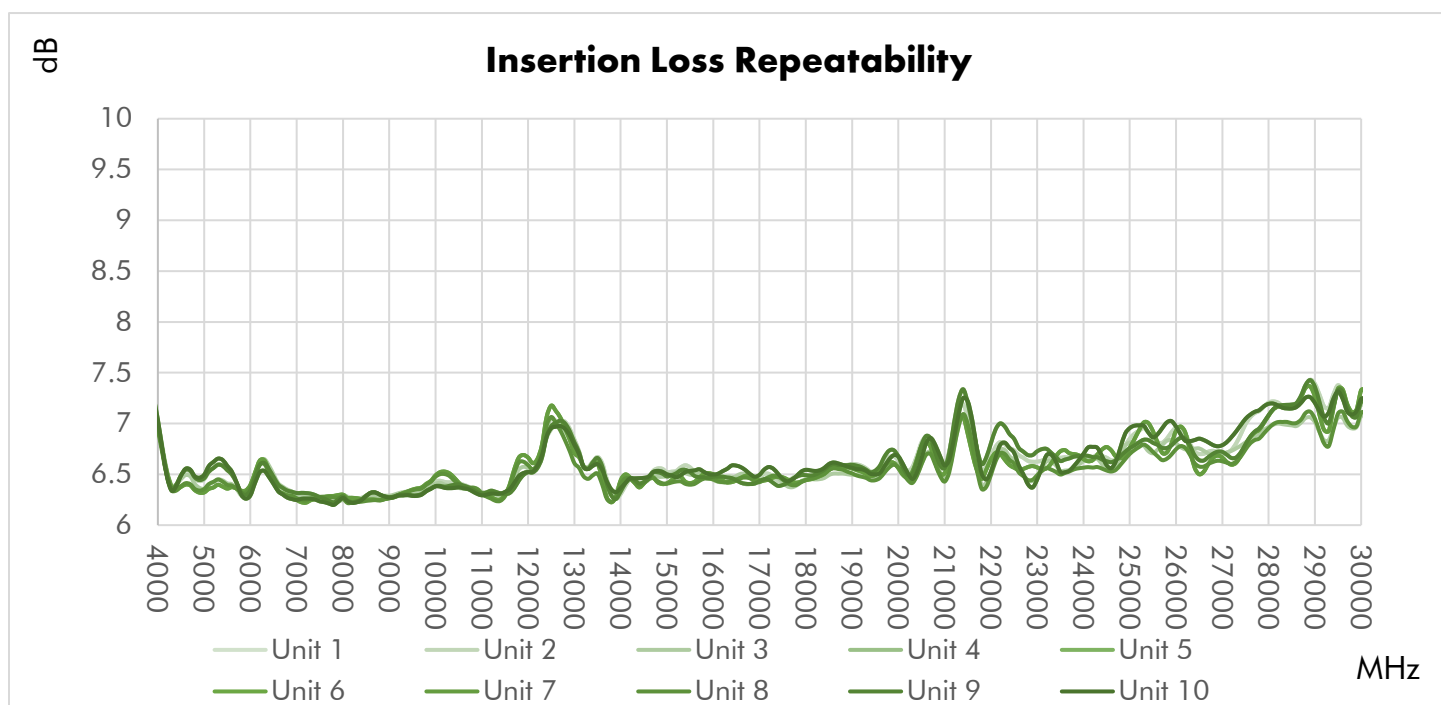
1. With reference to average.
2. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
3. Electrical specifications are tested at +25 °C.
4. To the best of our knowledge at the time of publication.

## Typical Performance at +25 °C





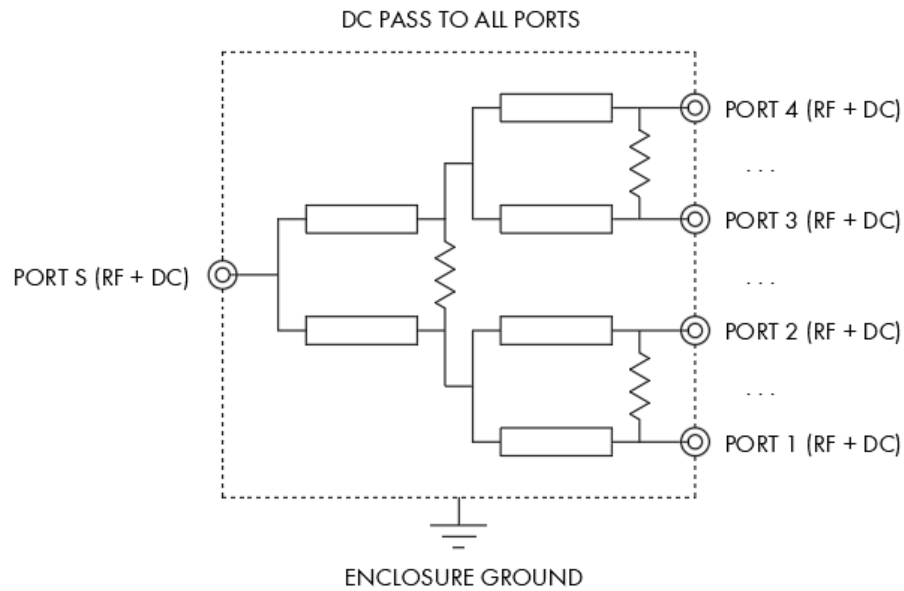
## Repeatability in Production



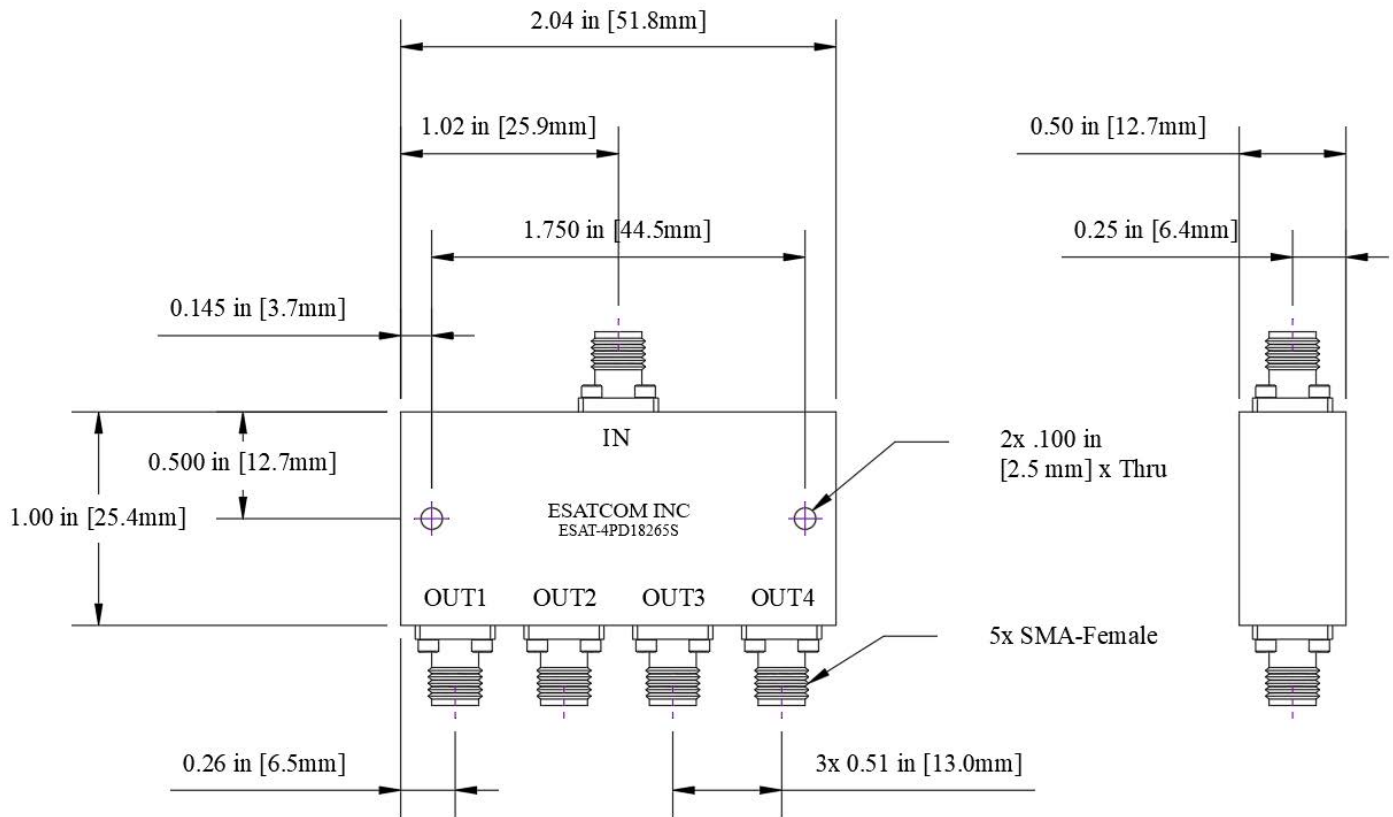
## Typical Performance Data

| Frequency<br>(MHz) | Return Loss<br>(dB) |        |        | Total Loss<br>(dB) |      | Isolation<br>(dB) |       |
|--------------------|---------------------|--------|--------|--------------------|------|-------------------|-------|
|                    | Port S              | Port 1 | Port 4 | S-1                | S-4  | 1-2               | 1-4   |
| 3000               | 5.51                | 9.96   | 9.61   | 7.67               | 7.78 | 13.46             | 18.50 |
| 4000               | 9.14                | 14.15  | 12.85  | 6.94               | 7.08 | 11.84             | 22.66 |
| 5000               | 19.98               | 22.05  | 18.93  | 6.35               | 6.45 | 21.06             | 24.76 |
| 6000               | 10.70               | 17.17  | 16.65  | 6.36               | 6.35 | 20.46             | 28.70 |
| 7000               | 14.84               | 20.85  | 33.79  | 6.33               | 6.35 | 21.50             | 30.23 |
| 8000               | 25.85               | 33.16  | 23.54  | 6.31               | 6.28 | 27.89             | 29.21 |
| 9000               | 24.27               | 38.31  | 20.70  | 6.28               | 6.31 | 25.97             | 31.34 |
| 10000              | 18.92               | 22.92  | 23.57  | 6.44               | 6.38 | 20.54             | 30.92 |
| 11000              | 22.89               | 25.08  | 29.93  | 6.45               | 6.28 | 21.28             | 27.42 |
| 12000              | 14.12               | 18.79  | 28.25  | 6.59               | 6.53 | 24.43             | 27.54 |
| 13000              | 11.52               | 18.10  | 17.89  | 6.89               | 6.79 | 19.81             | 29.74 |
| 14000              | 23.14               | 26.40  | 21.82  | 6.65               | 6.35 | 23.31             | 28.11 |
| 15000              | 15.59               | 30.61  | 22.76  | 6.77               | 6.47 | 23.57             | 28.10 |
| 16000              | 16.83               | 30.77  | 22.96  | 6.82               | 6.44 | 24.77             | 32.05 |
| 17000              | 22.91               | 26.01  | 26.09  | 6.73               | 6.46 | 22.55             | 30.03 |
| 18000              | 20.97               | 27.20  | 24.82  | 6.82               | 6.51 | 23.71             | 27.10 |
| 19000              | 29.07               | 24.96  | 19.85  | 6.77               | 6.51 | 28.63             | 29.66 |
| 20000              | 21.85               | 25.33  | 19.52  | 6.75               | 6.59 | 21.95             | 43.85 |
| 21000              | 16.29               | 19.50  | 17.35  | 6.66               | 6.43 | 28.65             | 32.67 |
| 22000              | 15.13               | 17.30  | 17.96  | 6.63               | 6.49 | 24.11             | 32.44 |
| 23000              | 19.06               | 25.56  | 28.43  | 6.64               | 6.42 | 20.41             | 33.26 |
| 24000              | 21.08               | 29.48  | 30.82  | 6.71               | 6.55 | 34.47             | 28.09 |
| 25000              | 18.33               | 27.76  | 21.42  | 6.87               | 6.79 | 24.83             | 28.24 |
| 26000              | 20.24               | 26.92  | 22.47  | 6.82               | 6.83 | 20.99             | 37.04 |
| 27000              | 30.94               | 36.48  | 23.10  | 6.83               | 6.52 | 21.57             | 33.68 |
| 28000              | 10.44               | 14.74  | 12.21  | 7.03               | 6.97 | 31.33             | 28.37 |
| 29000              | 16.98               | 12.79  | 12.93  | 7.29               | 7.15 | 24.68             | 28.78 |
| 30000              | 21.40               | 12.97  | 12.71  | 7.20               | 7.28 | 21.41             | 30.62 |

## Simplified Electrical Schematic



## Outline Dimensions



Outline drawing: OL-04-1826

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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