

## Power Divider, 3-way, 6-18GHz, SMA Female

## WM3PD-6-18-S



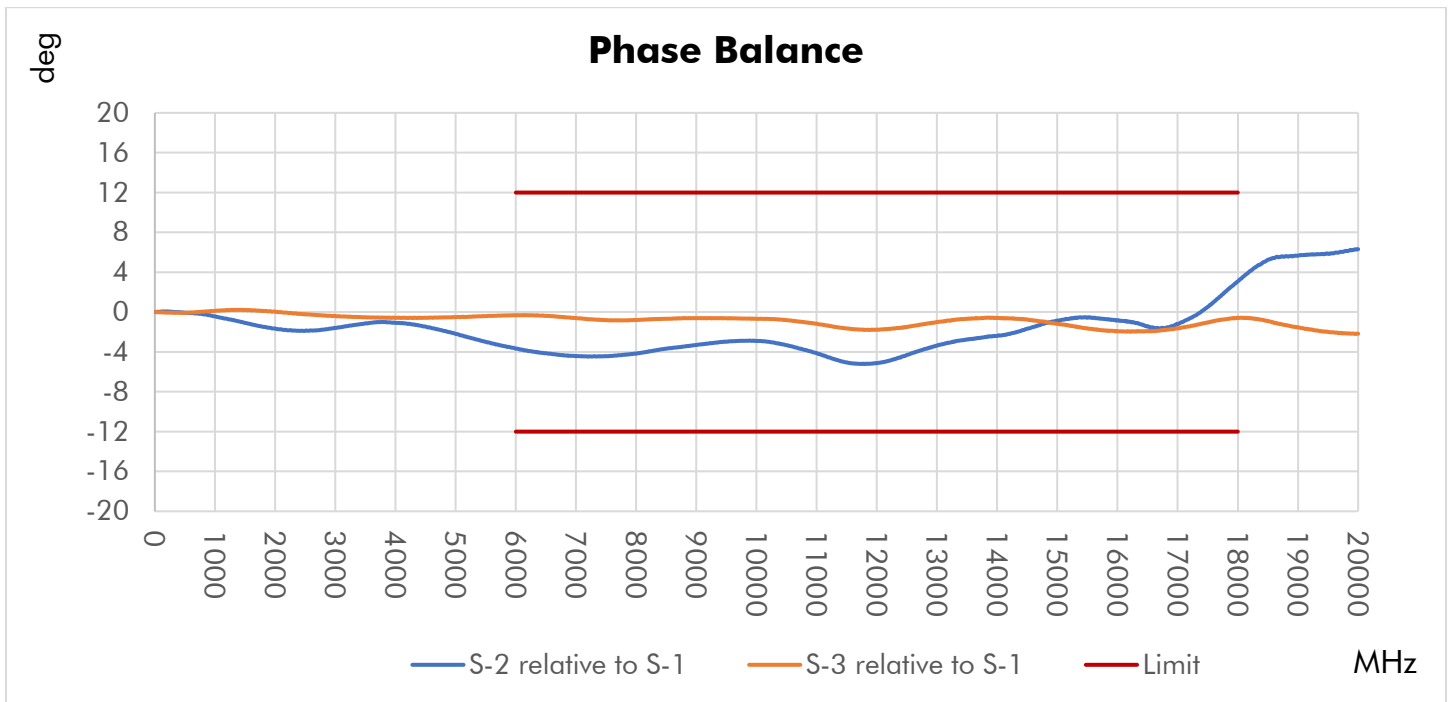
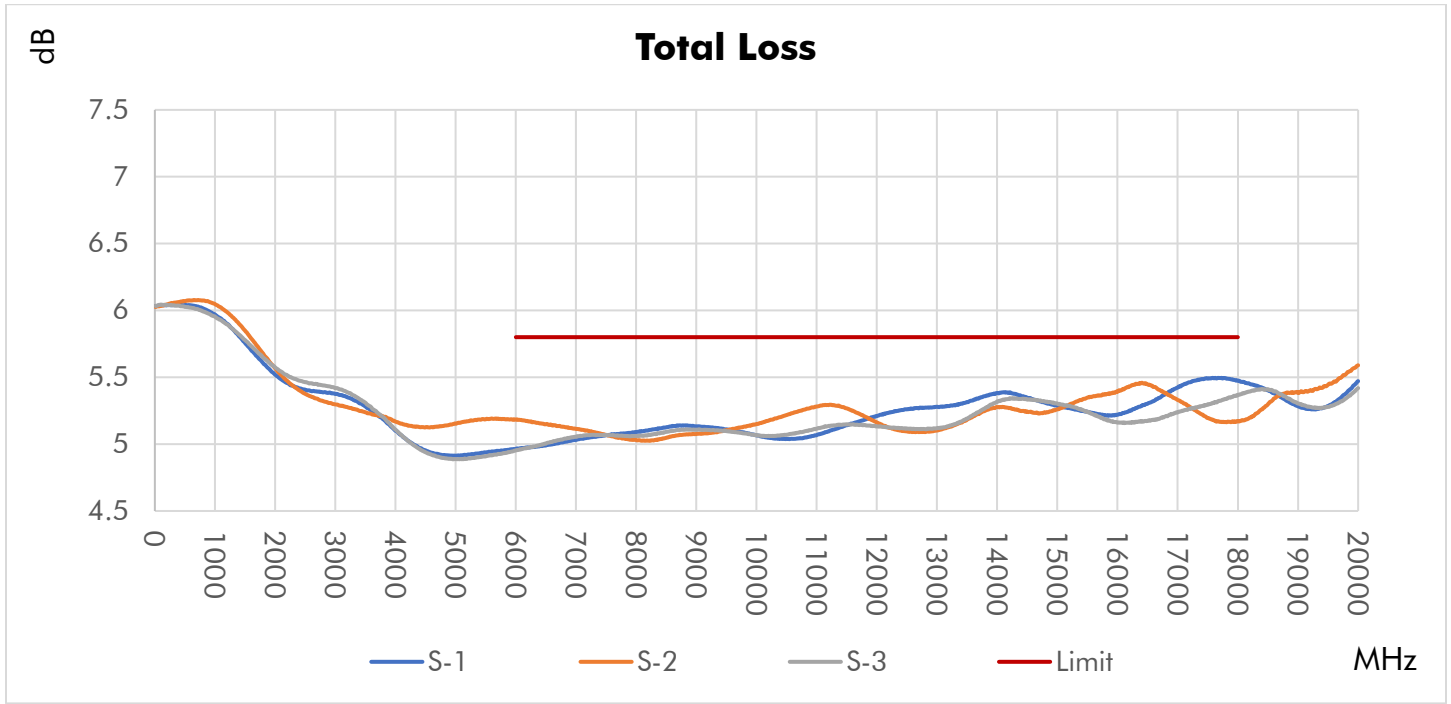
Parameter	Min.	Typ.	Max.	Unit
Frequency Range	6000		18000	MHz
Impedance		50		$\Omega$
Return Loss (Port S)	9.5	15.4		dB, min.
Return Loss (Port 1-2)	12.0	16.7		dB, min.
Insertion Loss above 4.78dB		0.3	1.0	dB, max.
Isolation	18	23		dB, min.
Amplitude Unbalance ( $\pm$ ) <sup>1</sup>		0.3	0.9	dB, max.
Phase Unbalance ( $\pm$ ) <sup>1</sup>		3.4	12	Degree, max.
Input Power (CW) <sup>2</sup>		10		W, max.
Combining Power (CW) <sup>2</sup>		0.167		W/port, max.
DC Current		0.200		A/port, max.

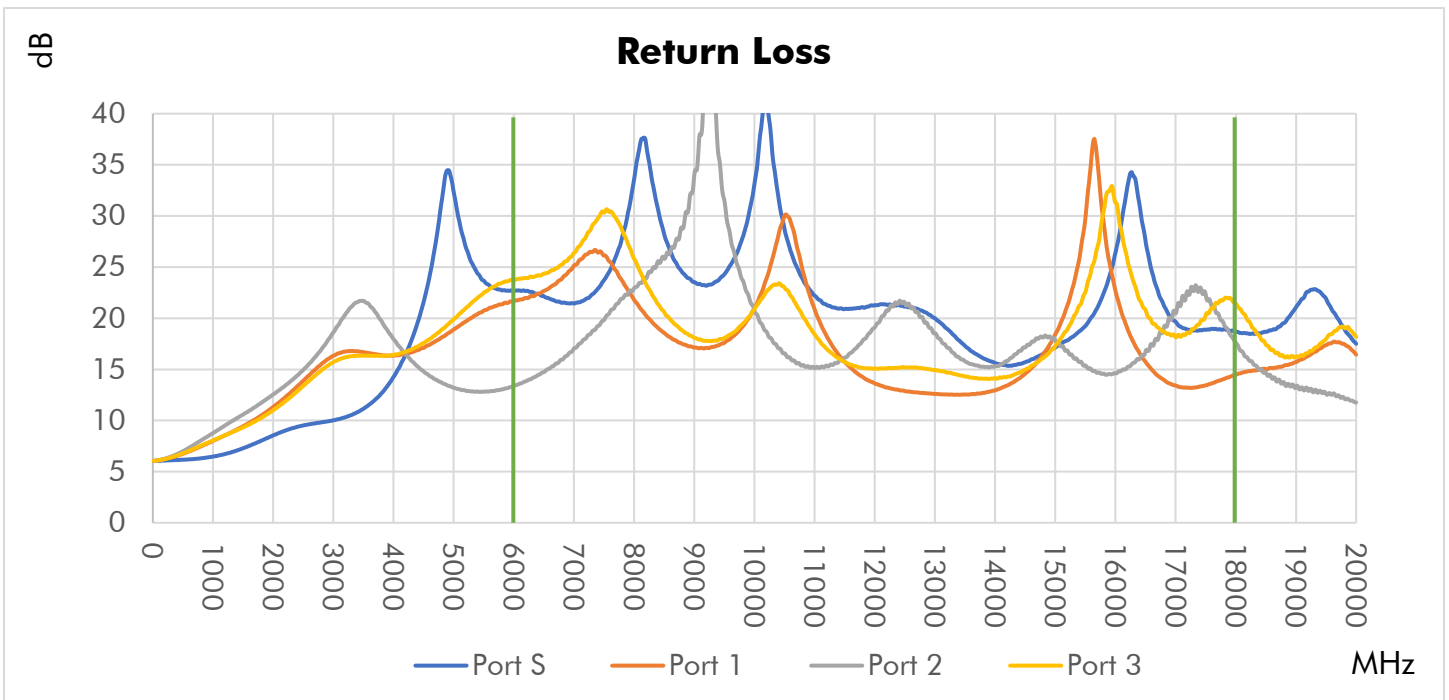
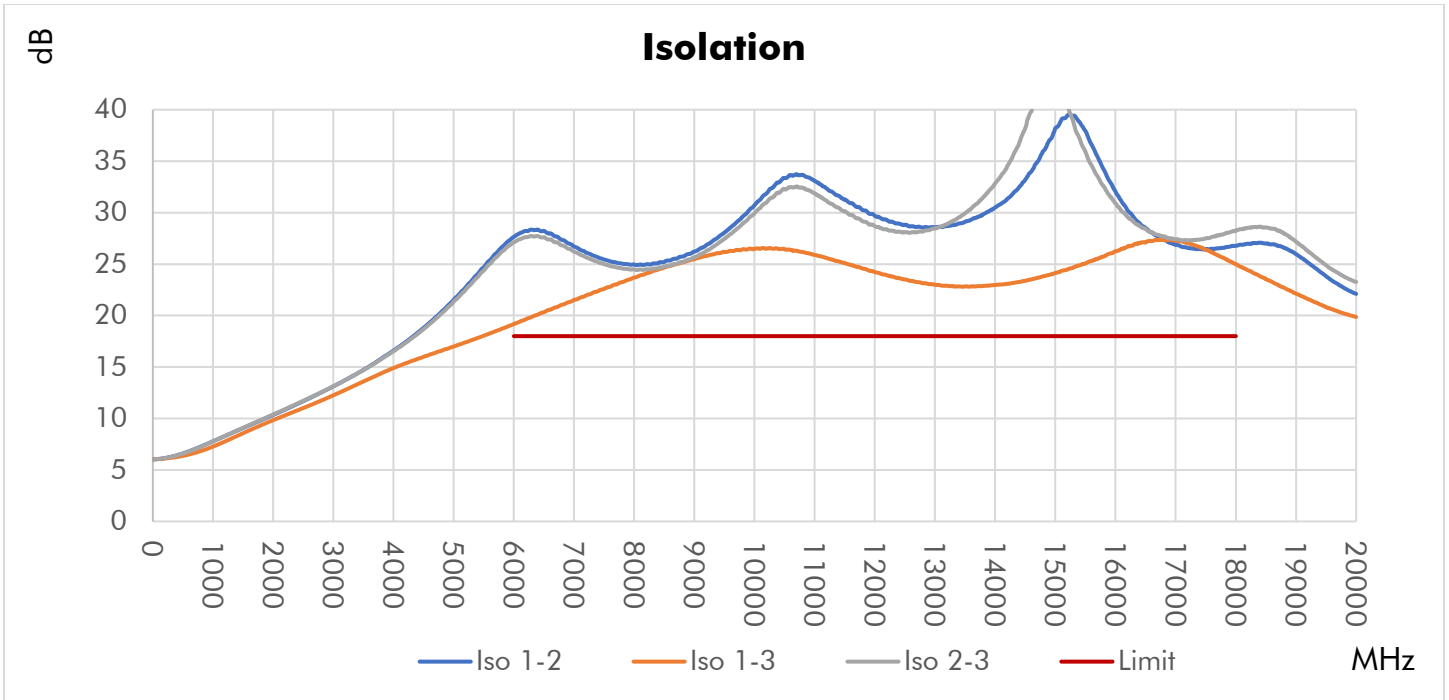
Connector Interface	SMA Female
Operating Temperature <sup>3</sup>	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Nominal Weight	57.0 g (2.0 oz)
Operating Humidity	10-90% (non-condensing)
Operating Environment	Indoor Use Only
HTSUS Code	8548.00.0000
ECCN	EAR99

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

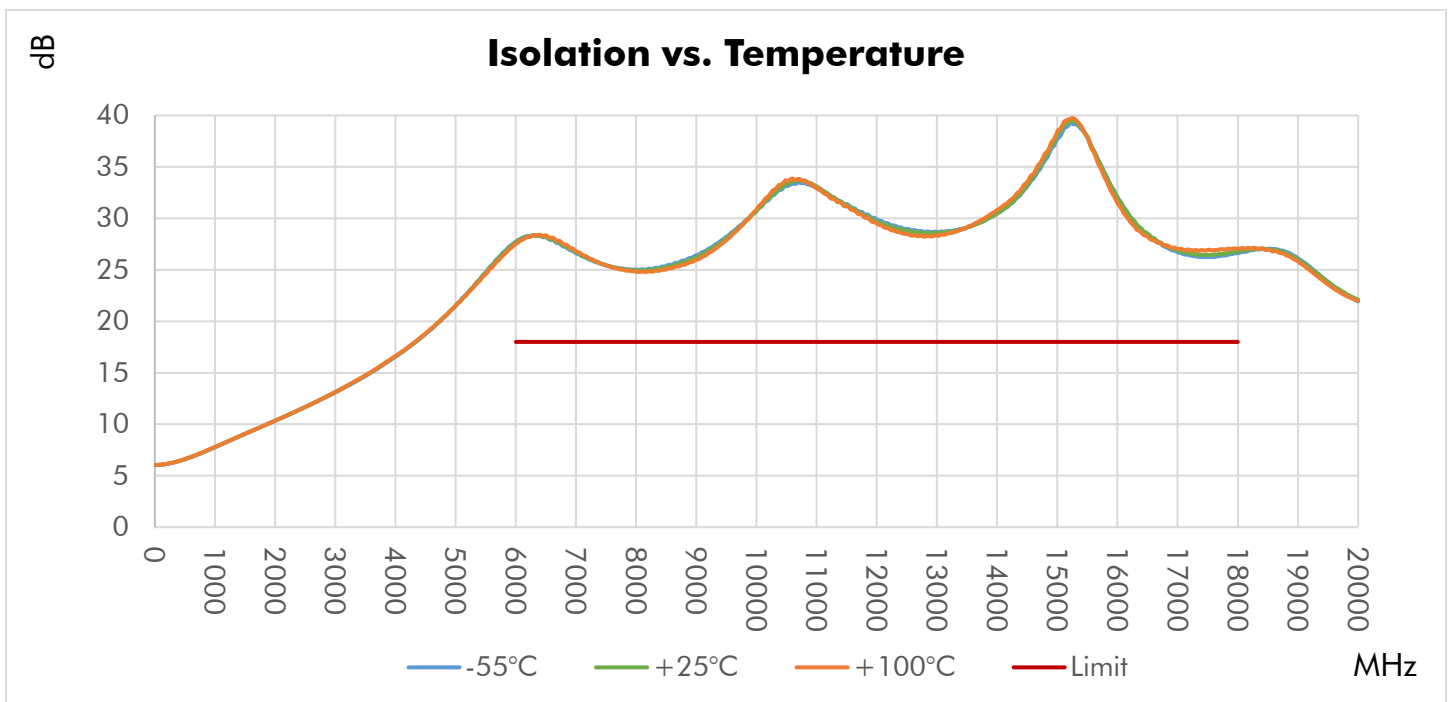
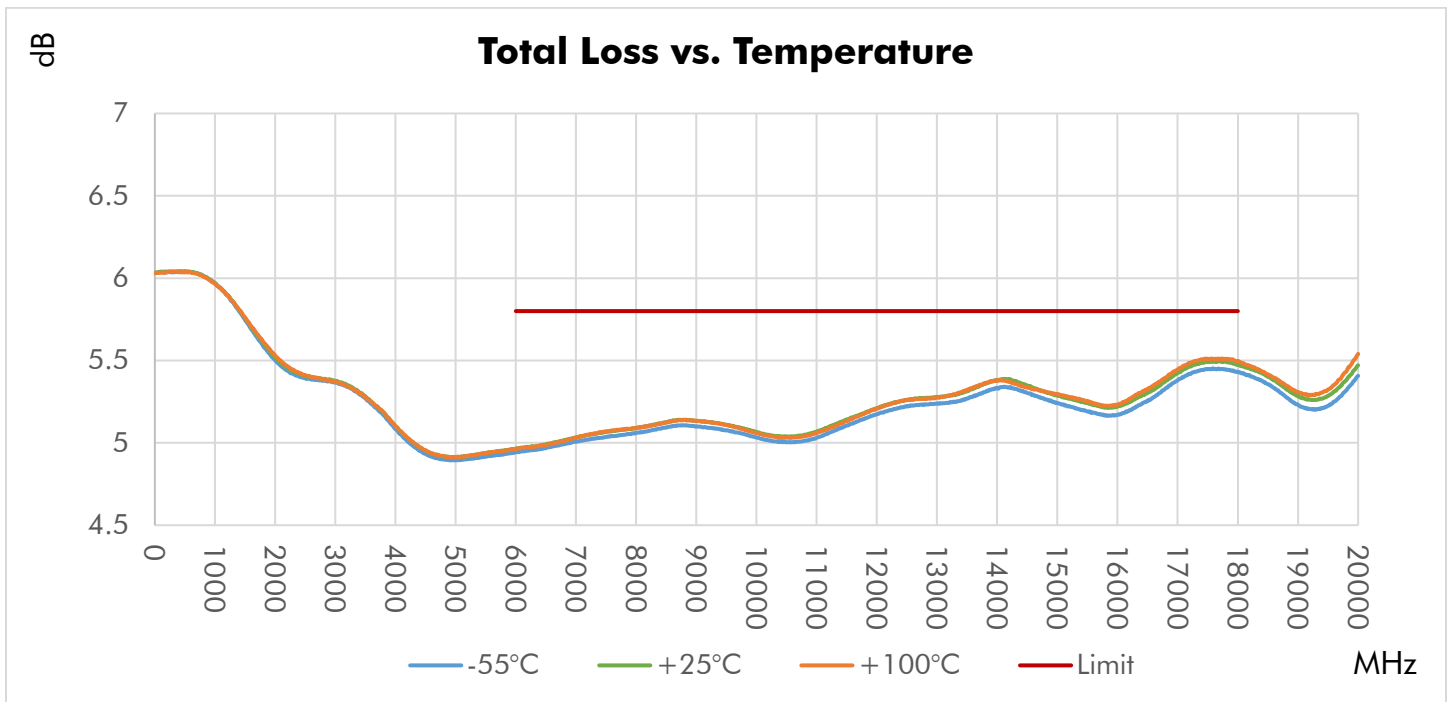
1. With reference to average.
2. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
3. Electrical specifications are tested at +25 °C.
4. To the best of our knowledge at the time of publication.

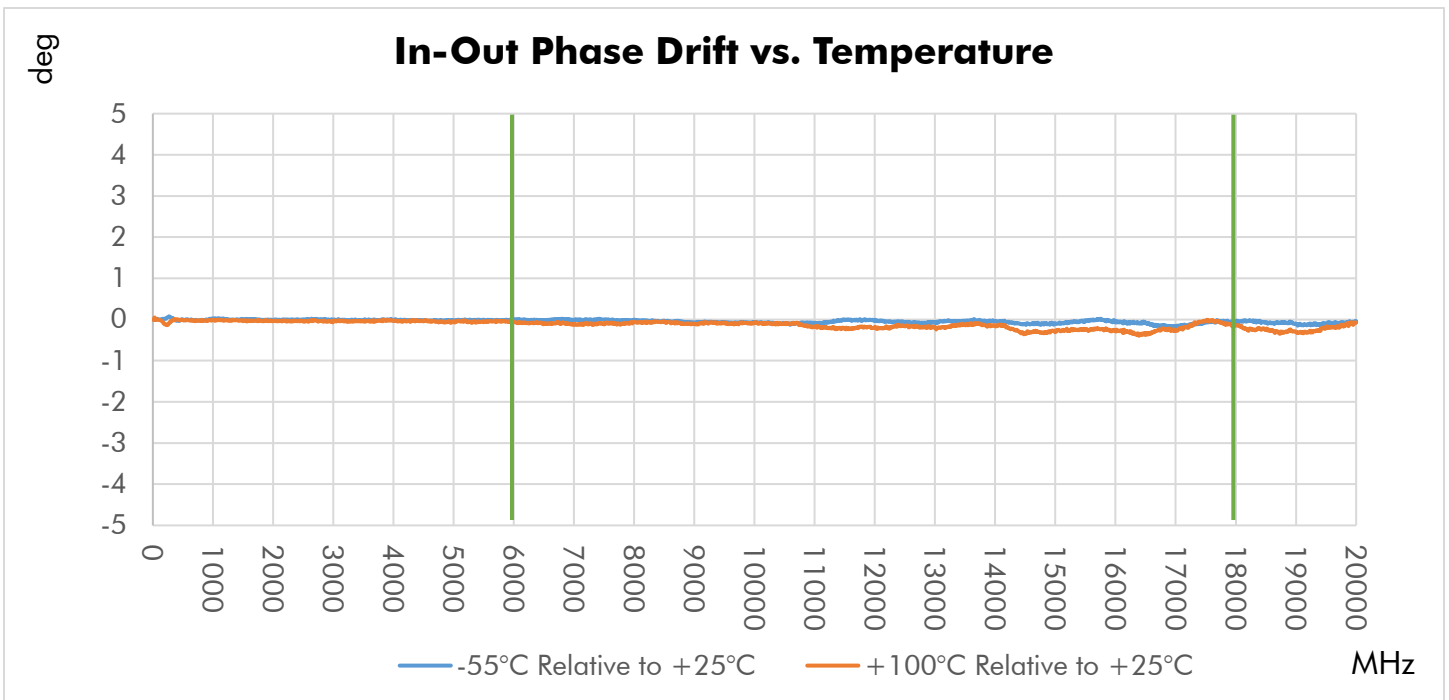
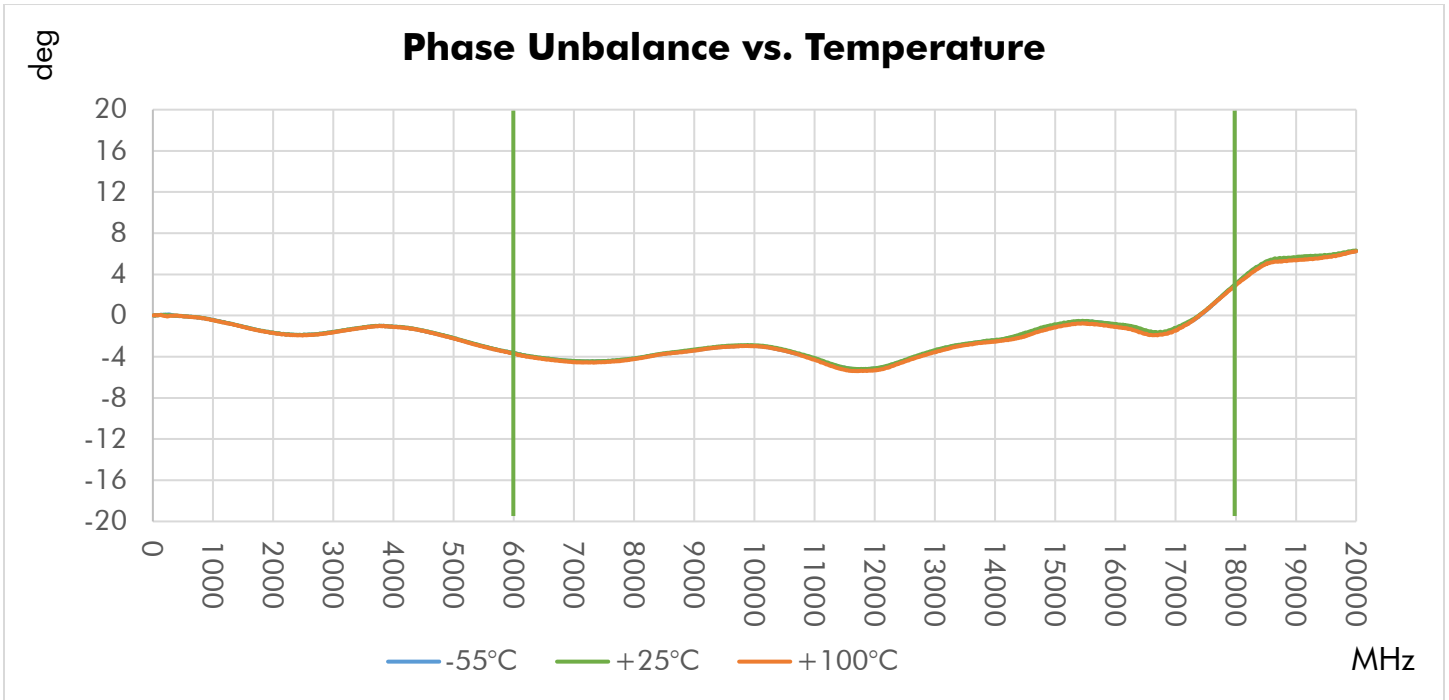
## Typical Performance at +25 °C



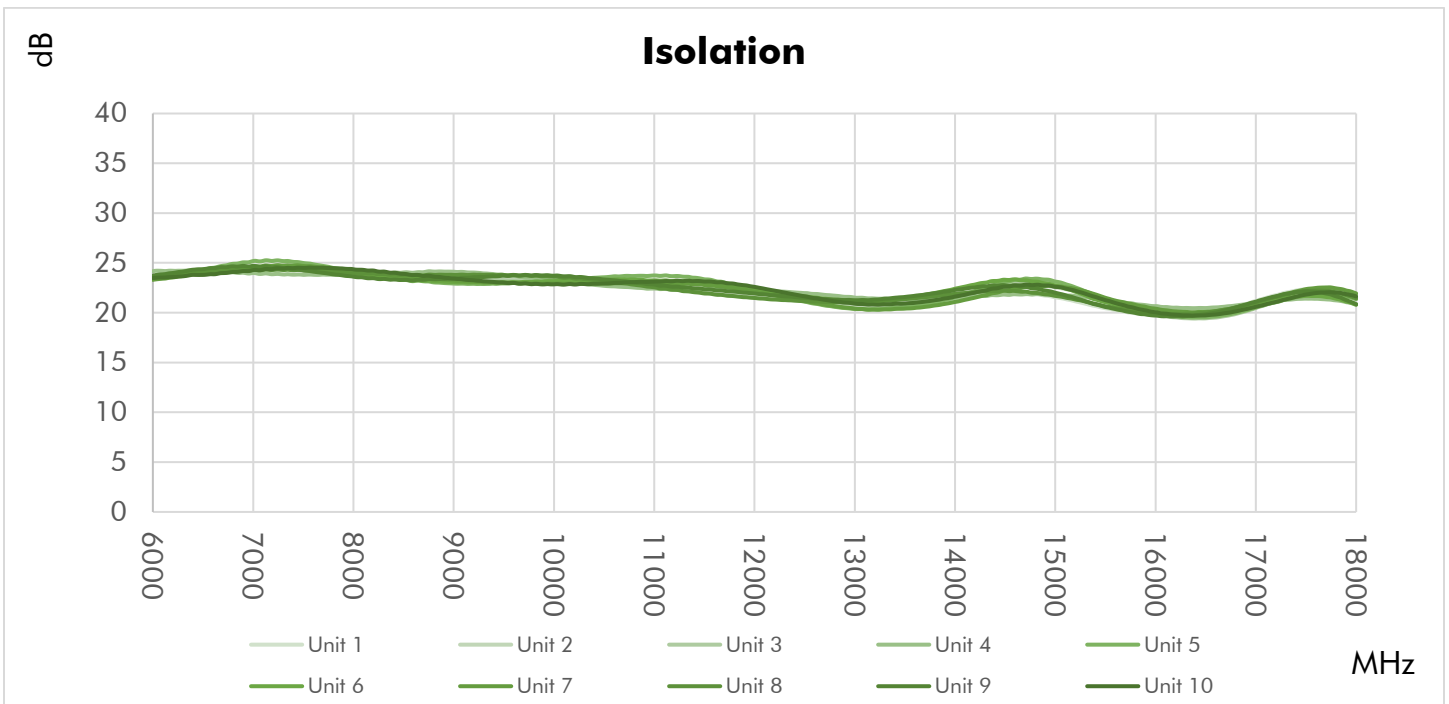
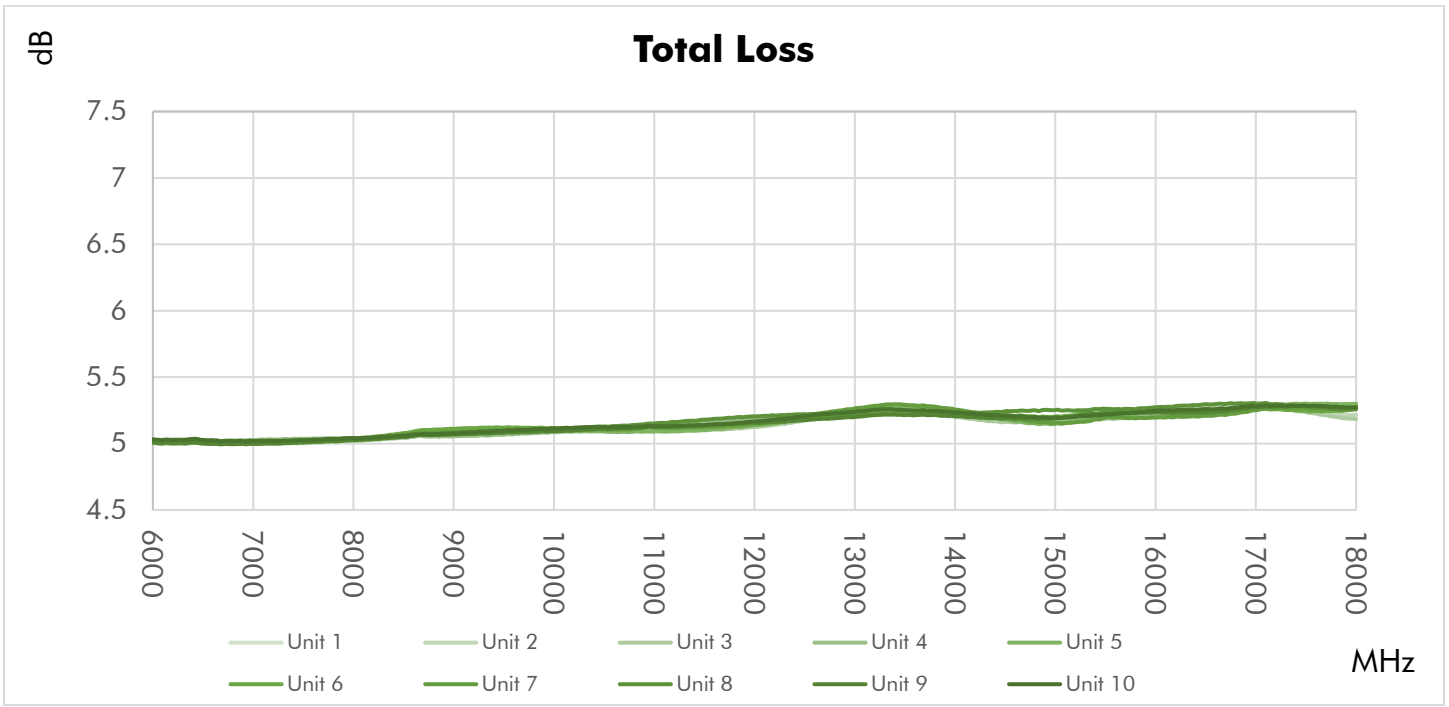


## Typical Performance Over Temperature





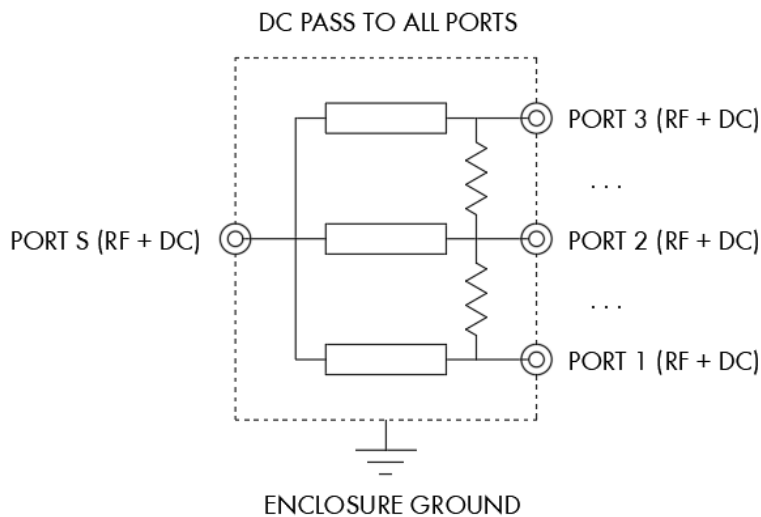
## Repeatability in Production



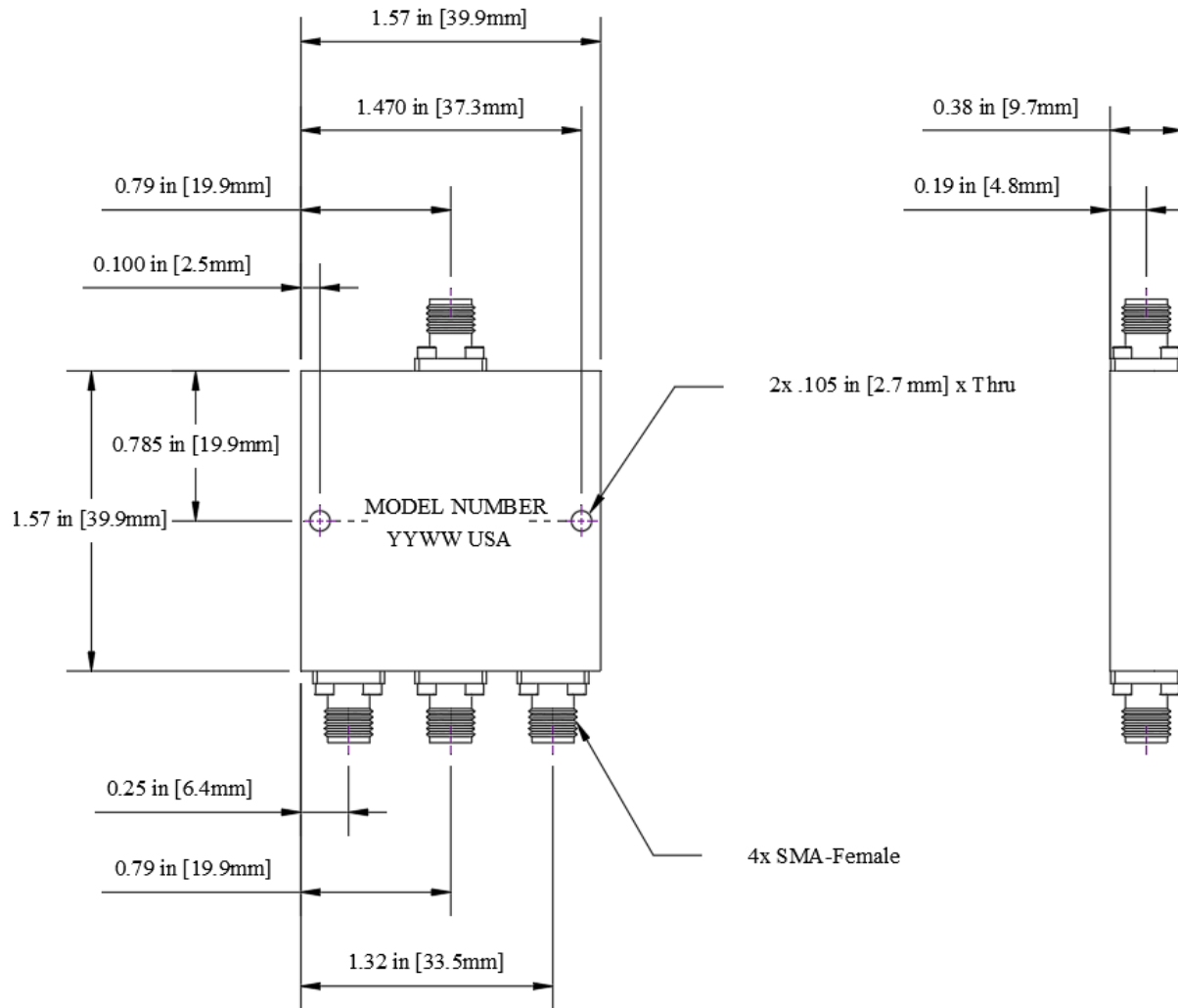
## Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)	
	Port S	Port 1	Port 2	S-1	S-2	1-2	1-3
6000	19.37	44.96	28.24	5.00	5.03	23.60	27.06
6500	21.92	37.35	25.38	5.00	5.02	24.28	28.80
7000	24.34	33.90	24.12	4.99	5.02	24.75	30.87
7500	23.40	29.62	24.43	5.00	5.03	24.41	33.15
8000	20.56	25.99	25.38	5.02	5.05	23.73	34.31
8500	18.84	24.04	25.80	5.05	5.07	23.33	33.99
9000	18.51	23.60	25.20	5.08	5.08	23.38	33.13
9500	19.55	24.86	24.30	5.09	5.07	23.65	32.46
10000	21.19	27.85	23.73	5.09	5.06	23.70	32.33
10500	21.86	33.95	24.43	5.09	5.07	23.33	32.69
11000	20.25	38.74	27.06	5.11	5.08	22.75	33.78
11500	18.73	34.30	32.98	5.14	5.09	22.16	36.05
12000	18.04	31.83	31.70	5.16	5.11	21.67	40.66
12500	18.00	29.16	27.01	5.19	5.12	21.32	45.18
13000	18.34	25.65	25.35	5.21	5.14	21.11	41.27
13500	18.80	23.30	26.55	5.22	5.15	21.40	37.50
14000	19.51	22.50	29.89	5.21	5.14	21.88	35.80
14500	20.32	23.54	32.97	5.20	5.13	22.14	34.70
15000	19.90	25.84	29.76	5.20	5.14	21.57	33.84
15500	19.14	29.28	26.74	5.21	5.16	20.44	33.15
16000	19.94	34.80	24.06	5.23	5.15	19.74	32.80
16500	21.03	26.80	20.62	5.24	5.13	19.91	33.03
17000	20.49	20.75	17.34	5.27	5.15	21.22	33.65
17500	21.12	18.68	16.17	5.28	5.13	22.37	32.66
18000	21.39	19.40	17.07	5.28	5.07	21.32	29.73

## Simplified Electrical Schematic



## Outline Dimensions



Outline drawing: OL-3186

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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