

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

WM4PD-4-18-S



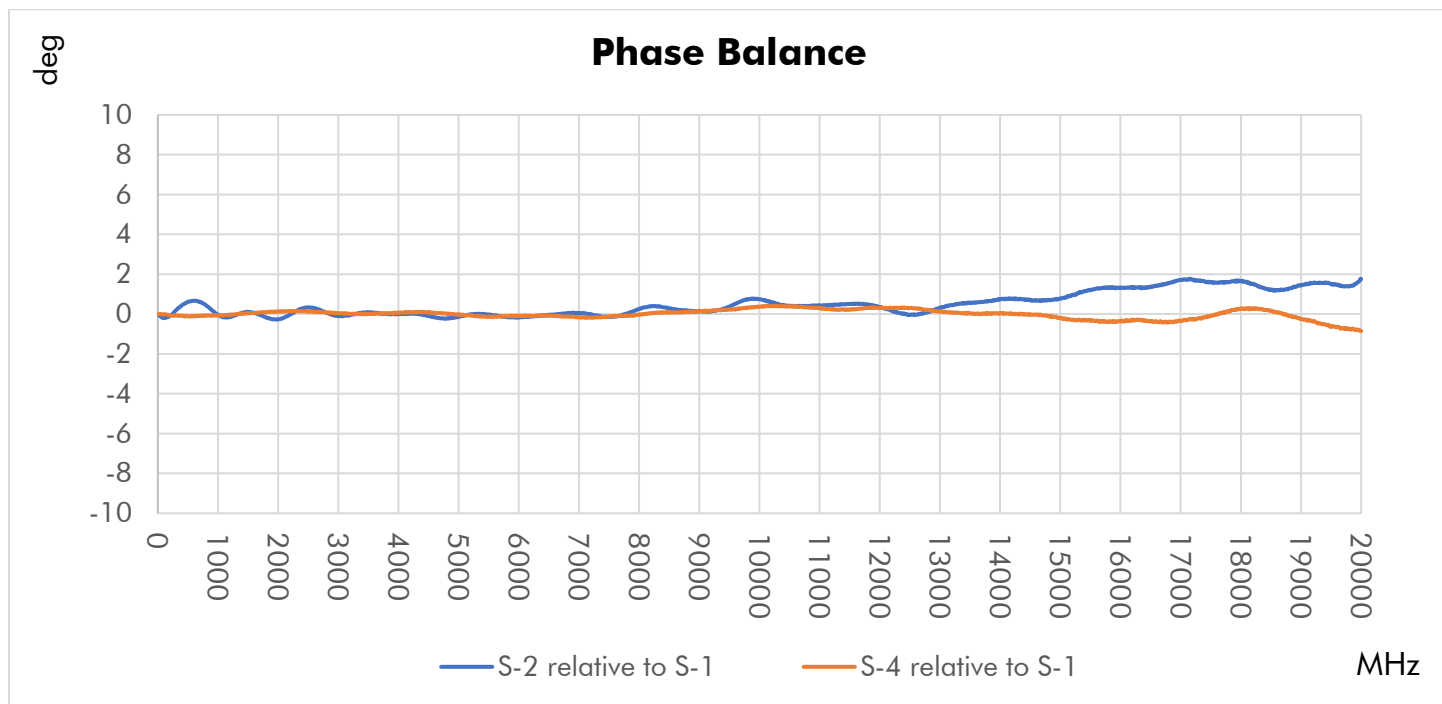
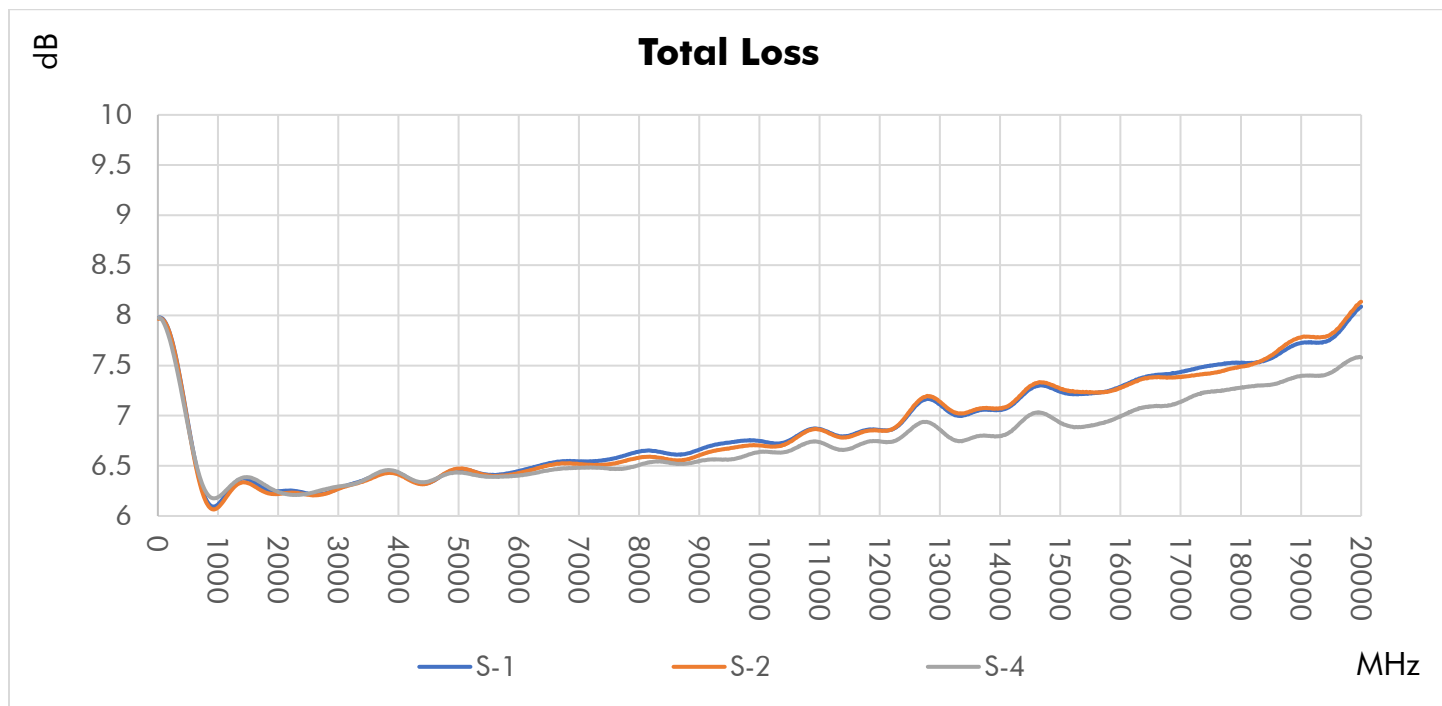
Parameter	Min.	Typ.	Max.	Unit
Frequency Range	4000		18000	MHz
Impedance		50		Ω
Return Loss (Port 5)	12	13		dB, min.
Return Loss (Port 1-4)	14	16		dB, min.
Insertion Loss above 6.02 dB		0.7	1.0	dB, max.
Isolation	18	21		dB, min.
Amplitude Unbalance (\pm) ¹		0.4	0.6	dB, max.
Phase Unbalance (\pm) ¹		6	10	Degree, max.
Input Power (CW) ²		30		W, max.
DC Current		0.4 A (100 mA at each port)		max.

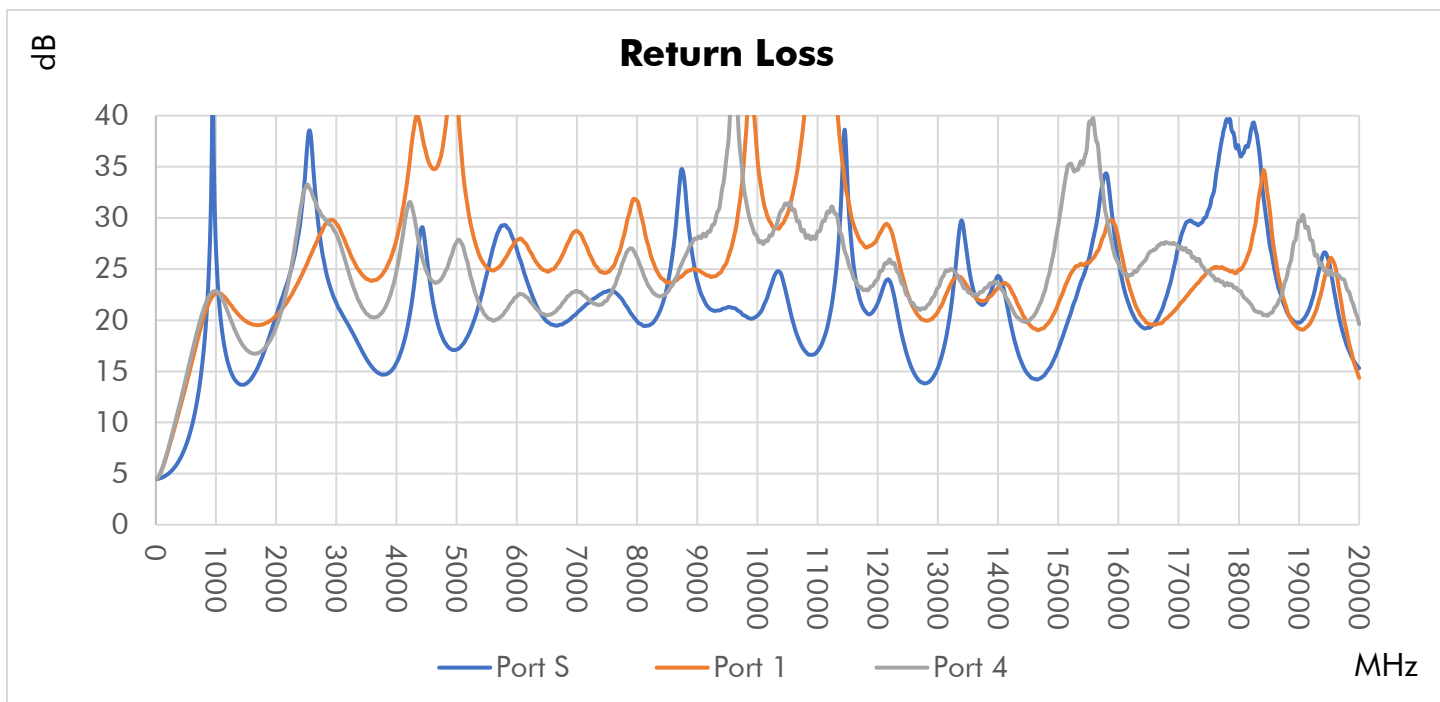
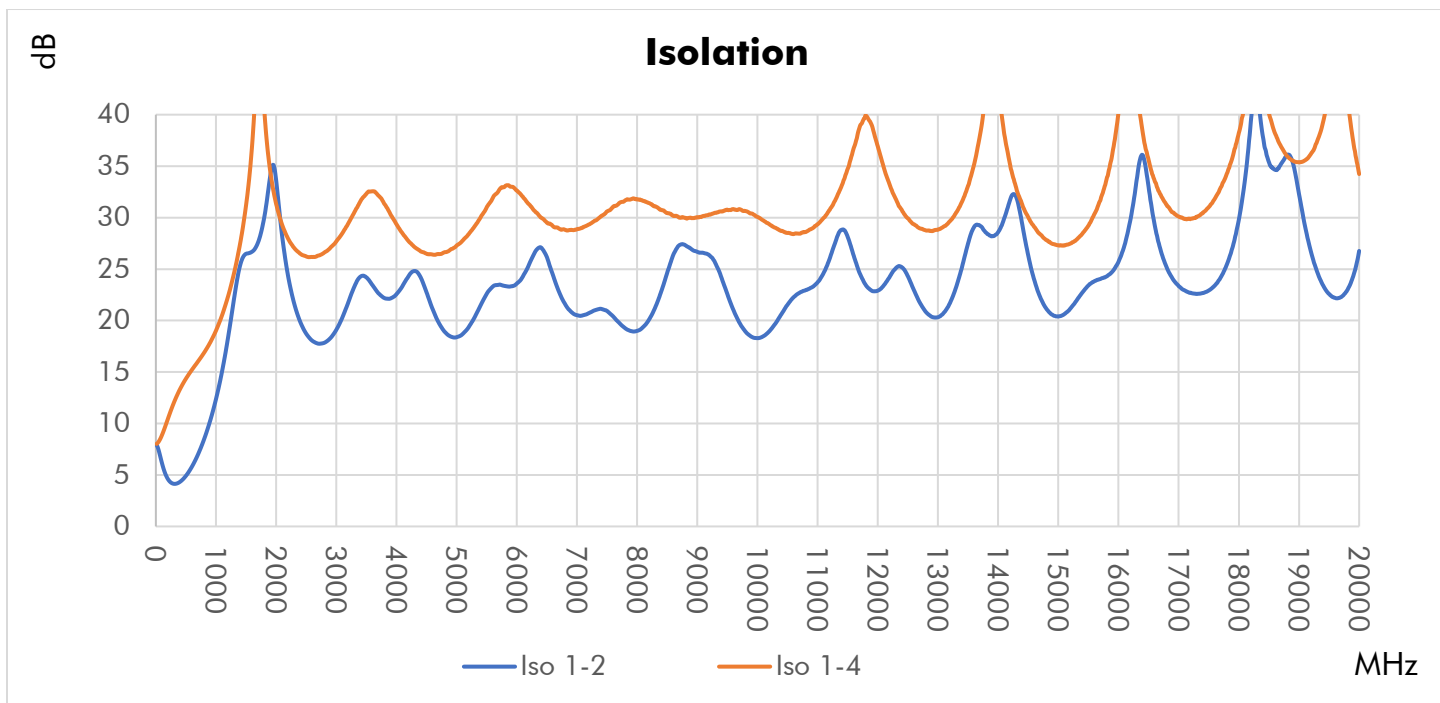
Connector Interface	SMA Female
Operating Temperature ³	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Nominal Weight	62g (2.2oz)
Operating Humidity	10-90% (non-condensing)
Operating Environment	Indoor Use Only
HTSUS Code	8548.00.0000
ECCN	EAR99

RoHS Status ⁴	RoHS3 Compliant
REACH Status ⁴	REACH Unaffected
Enclosure Material	Aluminum
Connectors Material	Stainless Steel
Contacts Material	Beryllium Copper, Gold Plated
Insulators Material	Virgin PTFE
Finish	Green Paint, Laser Marked
Country of Origin	United States of America

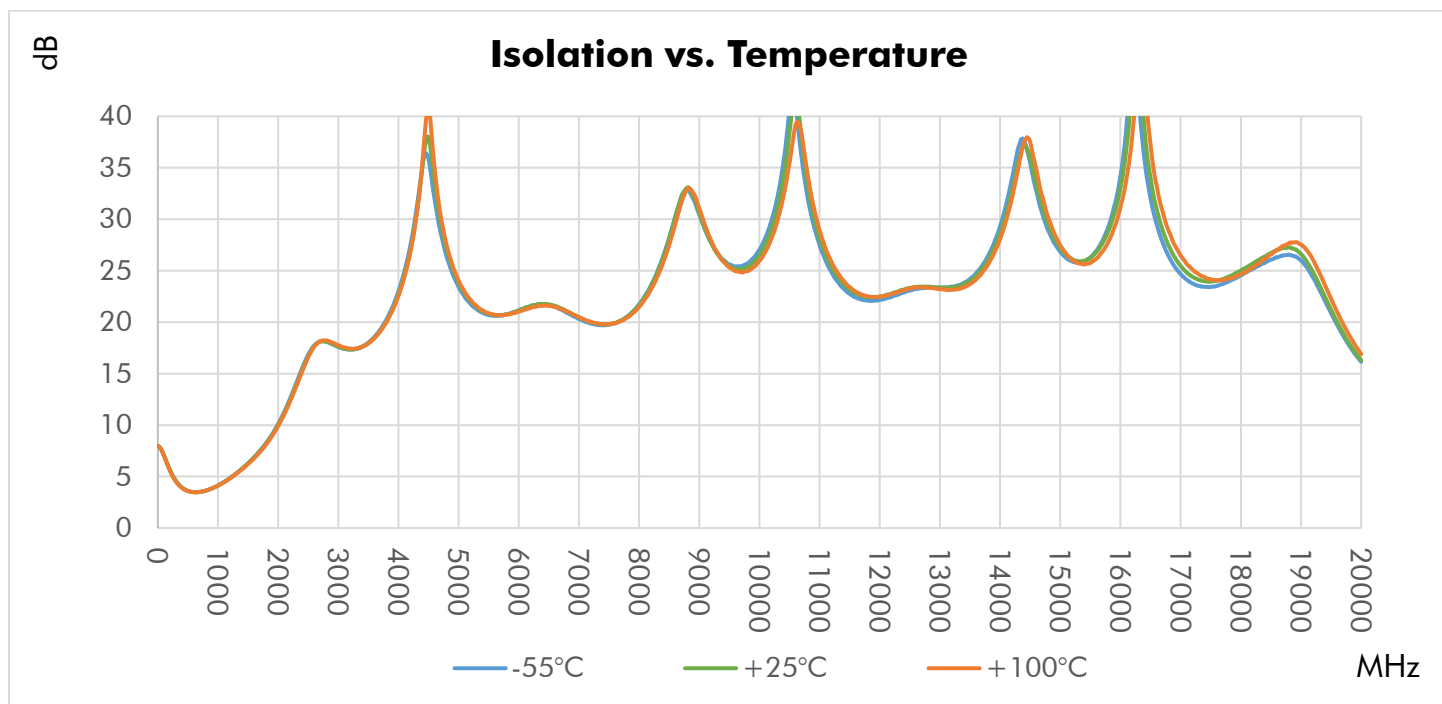
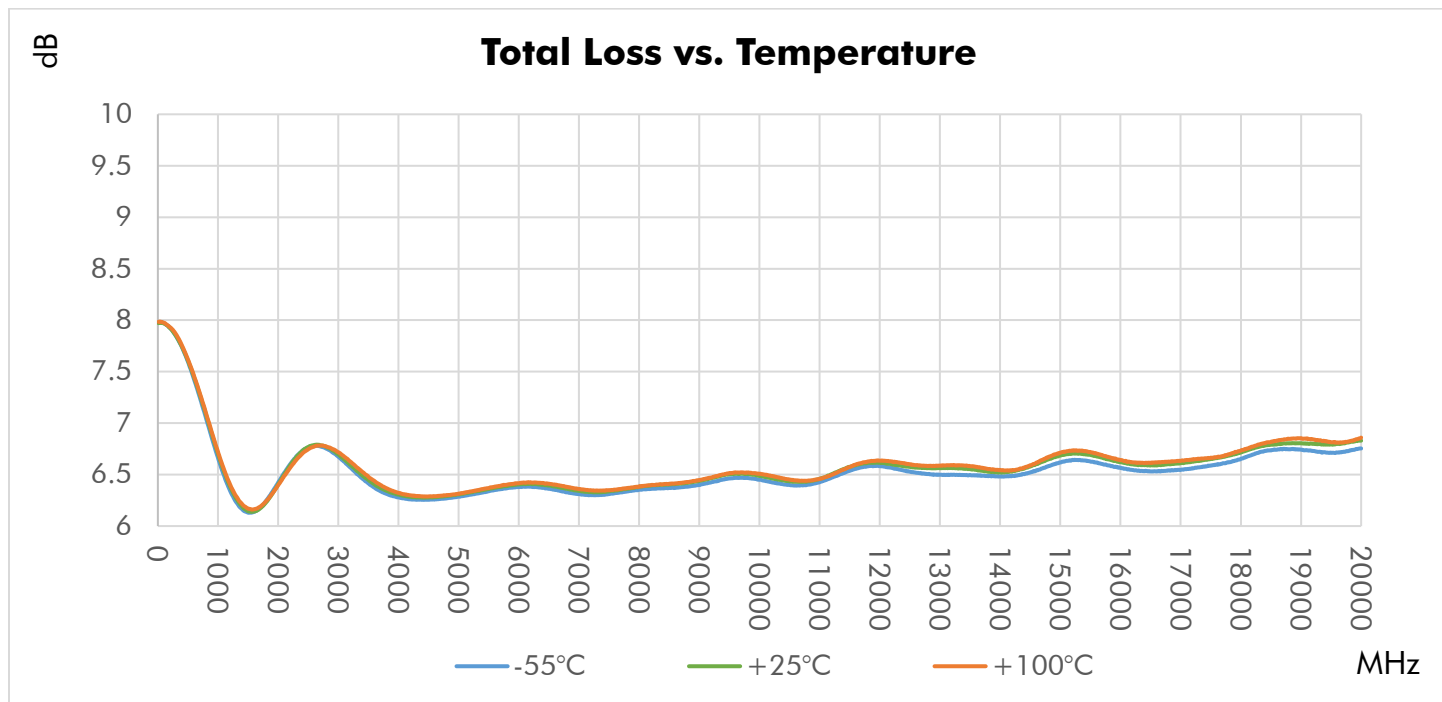
1. With reference to average.
2. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
3. Electrical specifications are tested at +25 °C.
4. To the best of our knowledge at the time of publication.

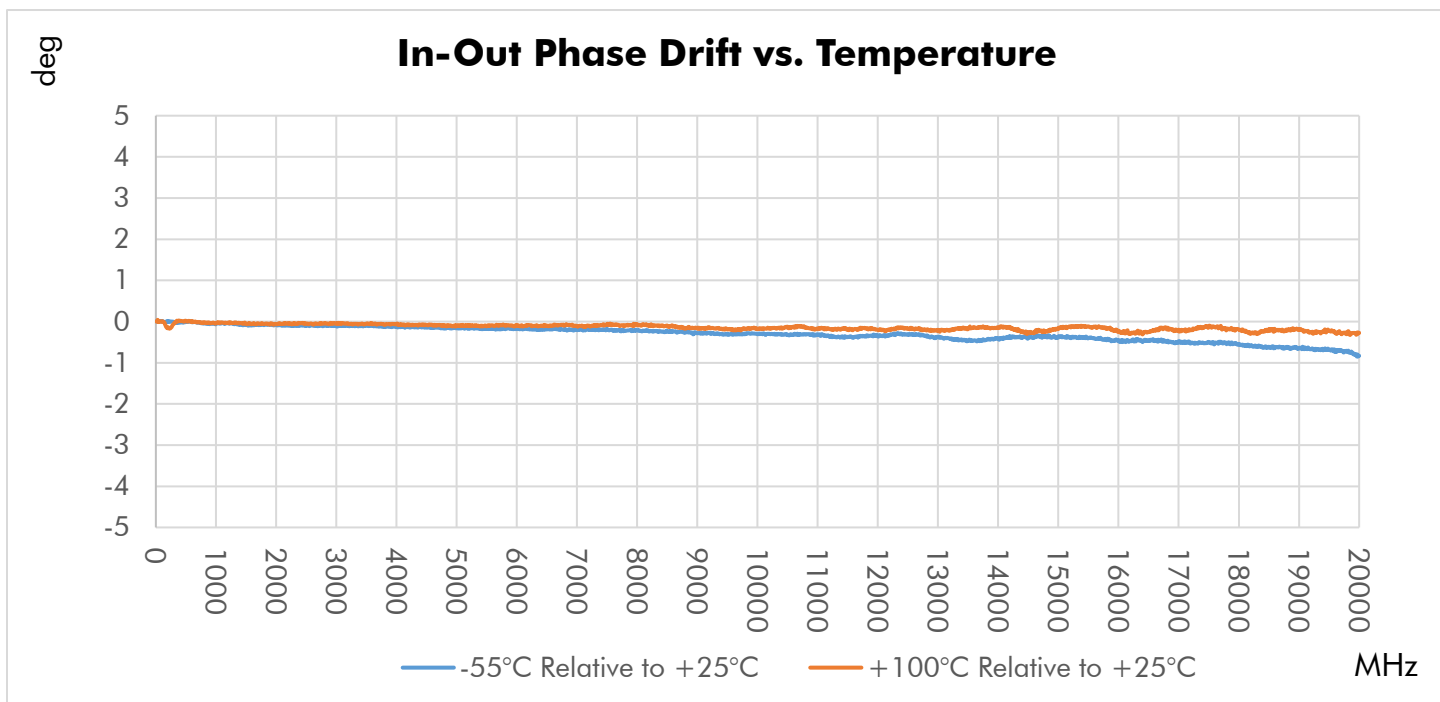
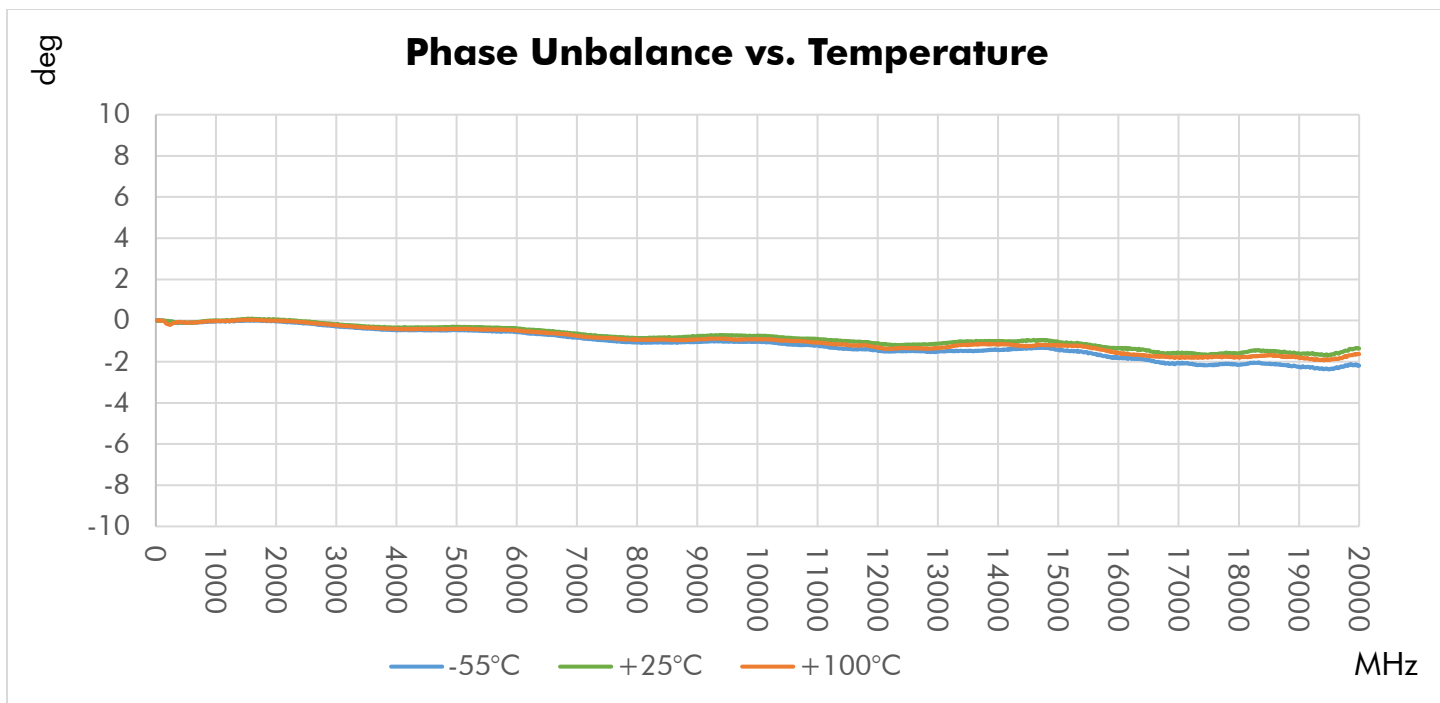
Typical Performance at +25 °C



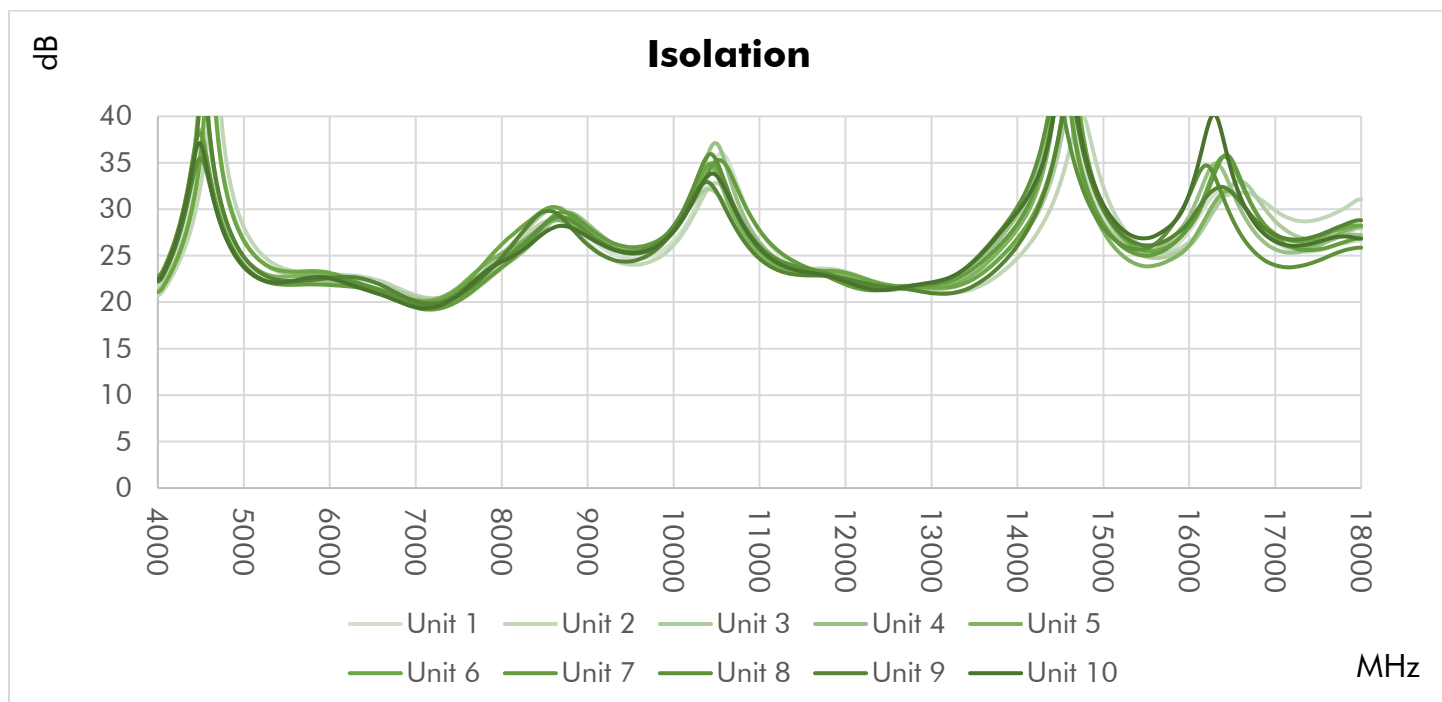
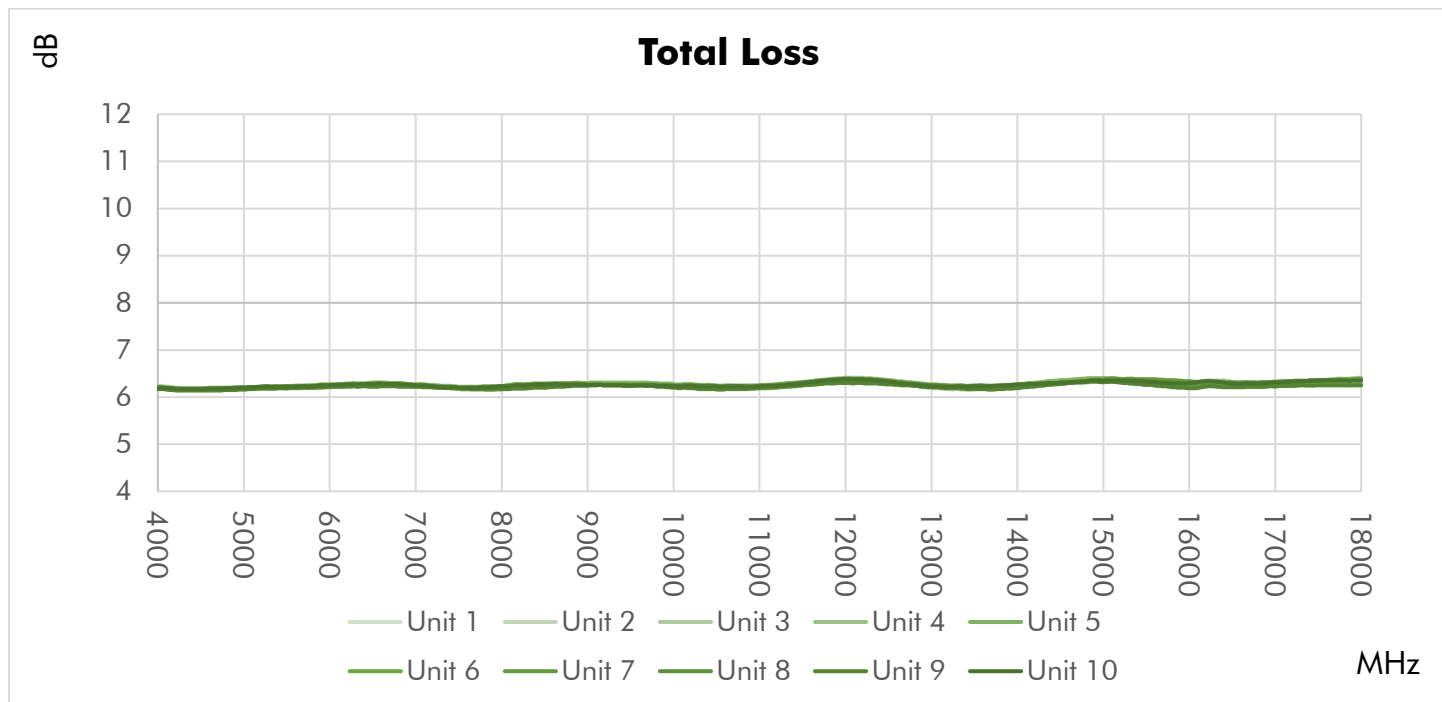


Typical Performance Over Temperature





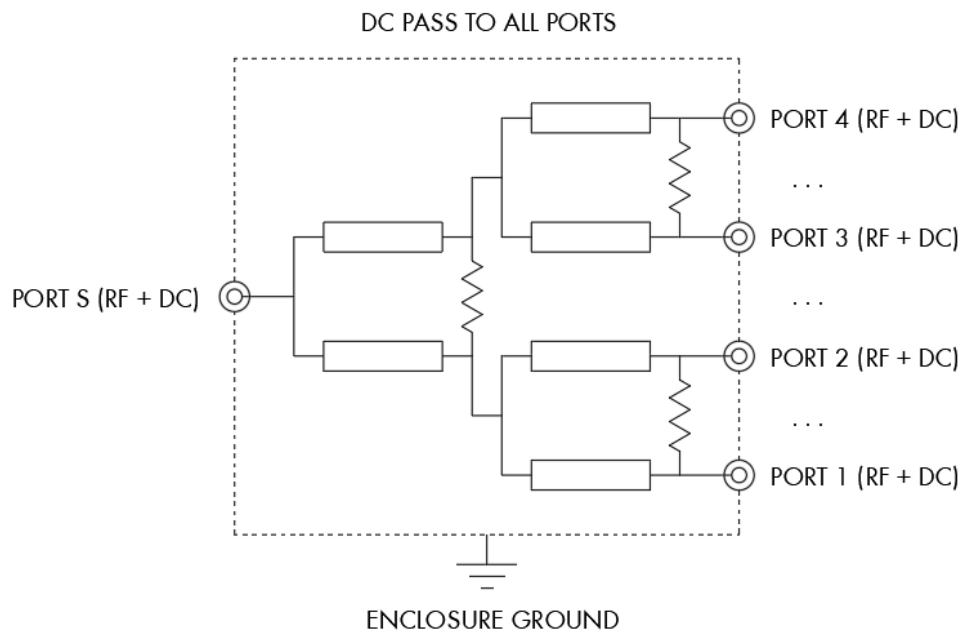
Repeatability in Production



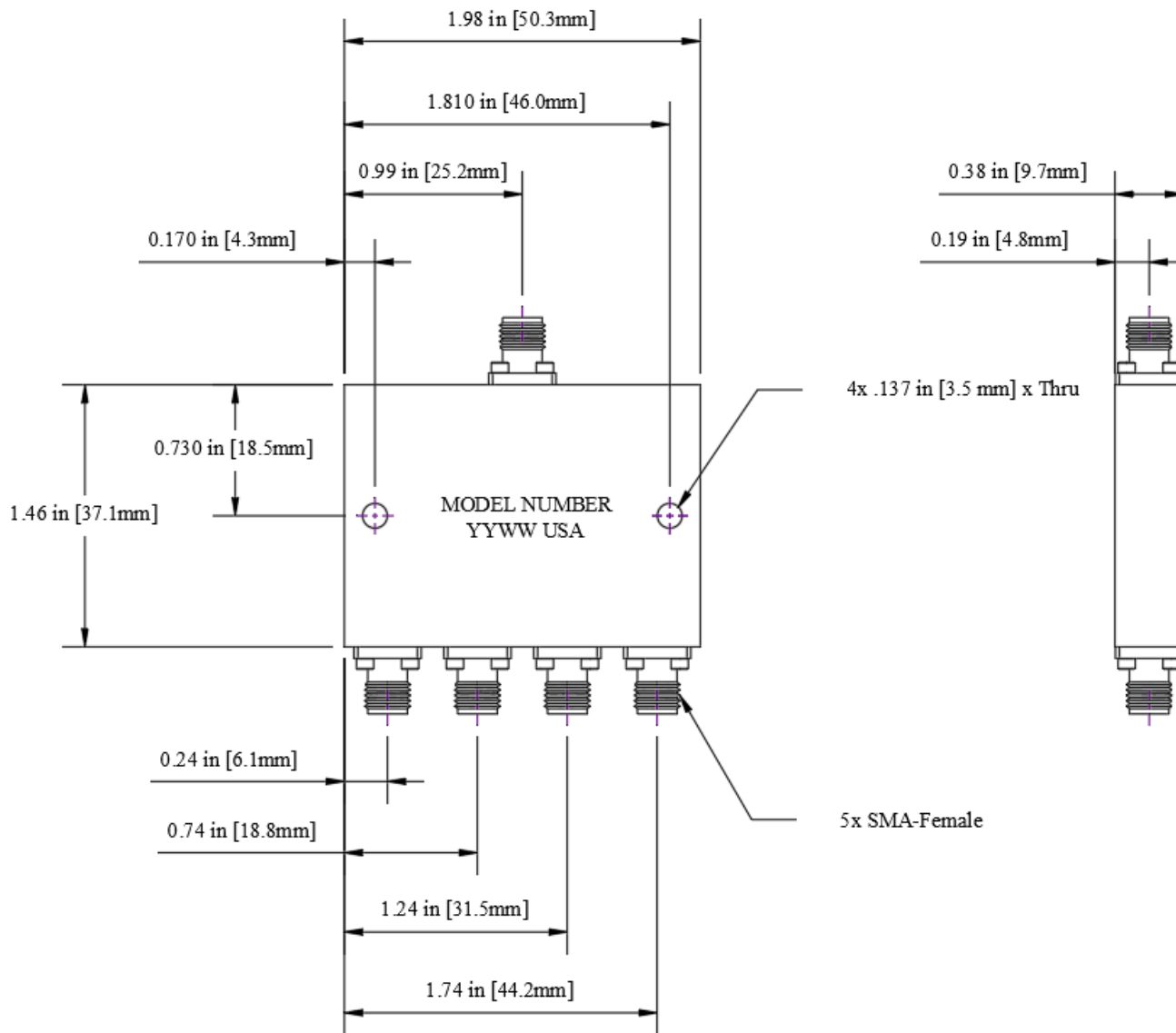
Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)
	Port S	Port 1	Port 4	S-1	S-4	
4000	17.8	23.8	17.9	6.0	6.1	21.3
4500	28.3	35.1	28.1	6.1	6.2	38.1
5000	24.7	37.5	25.0	6.1	6.2	24.8
5500	19.6	36.0	19.7	6.3	6.3	22.4
6000	17.5	33.8	17.3	6.2	6.2	22.5
6500	18.1	33.7	18.1	6.3	6.3	22.0
7000	20.9	32.9	20.9	6.3	6.2	20.1
7500	30.8	36.7	30.5	6.2	6.2	20.2
8000	28.2	37.8	28.0	6.2	6.3	23.0
8500	22.9	31.2	22.8	6.2	6.2	29.5
9000	20.0	24.9	20.0	6.5	6.6	28.7
9500	19.2	22.2	19.2	6.2	6.1	23.7
10000	19.5	22.3	19.6	6.2	6.3	25.9
10500	22.5	26.6	22.5	6.4	6.3	43.8
11000	37.1	32.0	37.7	6.1	6.3	25.8
11500	18.9	25.5	18.9	6.4	6.4	23.5
12000	14.7	25.0	14.6	6.4	6.4	24.0
12500	15.3	29.7	15.3	6.4	6.4	23.2
13000	20.3	30.0	20.3	6.4	6.4	22.1
13500	34.2	27.4	34.6	6.2	6.3	22.5
14000	30.1	28.7	29.9	6.3	6.3	26.1
14500	23.6	24.3	23.5	6.3	6.4	34.3
15000	18.1	20.3	18.1	6.4	6.4	27.7
15500	15.0	19.5	15.1	6.5	6.5	23.9
16000	15.5	21.1	15.5	6.4	6.4	25.8
16500	22.1	24.7	22.2	6.4	6.4	30.1
17000	31.6	30.2	31.9	6.3	6.4	24.6
17500	22.8	34.0	22.9	6.3	6.3	23.6
18000	23.4	29.7	23.3	6.4	6.4	27.1
18500	20.8	25.9	20.7	6.4	6.4	31.3
19000	17.1	24.8	17.2	6.3	6.3	32.1
19500	17.8	30.3	17.9	6.5	6.6	24.3
20000	22.8	27.1	22.8	6.3	6.5	18.2

Simplified Electrical Schematic



Outline Dimensions



Outline drawing: OL-4184

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

Tolerances on 2-pl decimals: ± 0.03 . 3-pl decimals: ± 0.015 .

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