

Power Divider, 4-way, 0.5-18GHz, SMA Female

WM4PD-0.5-18-S



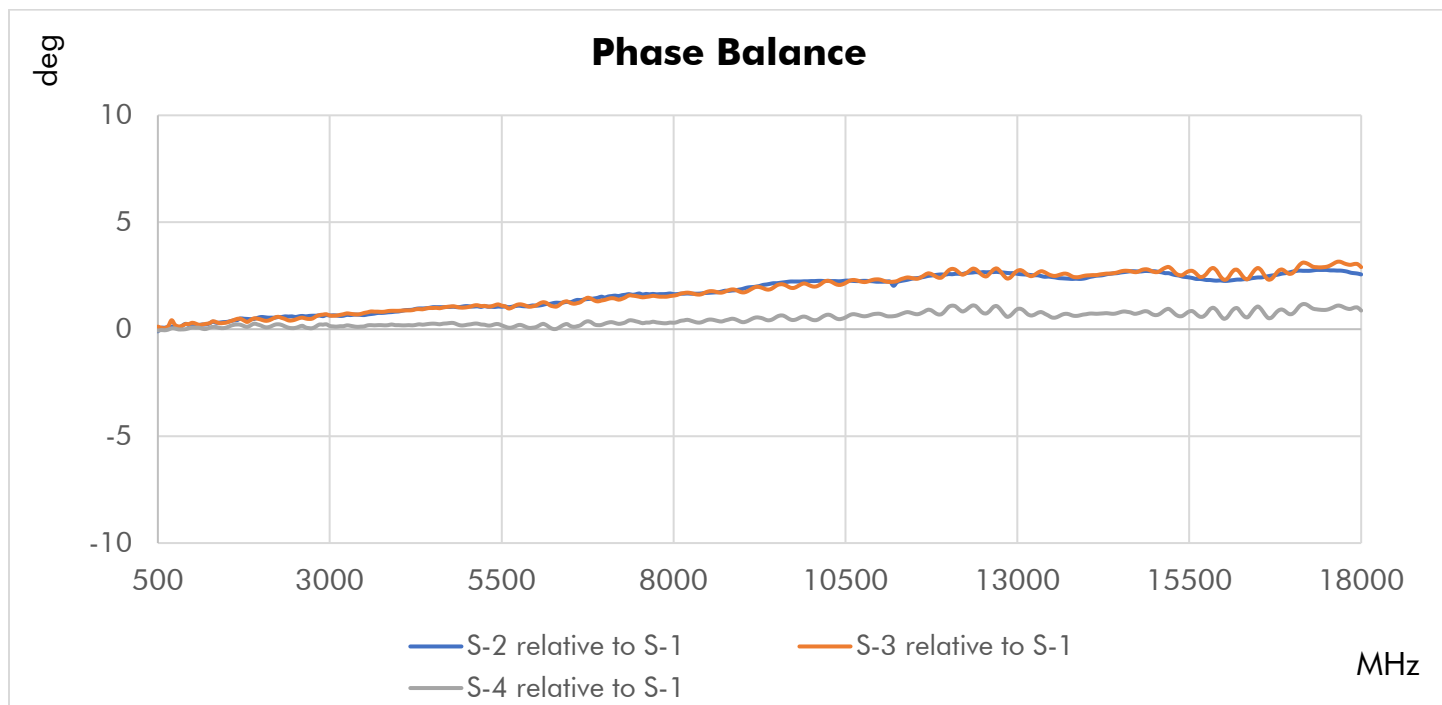
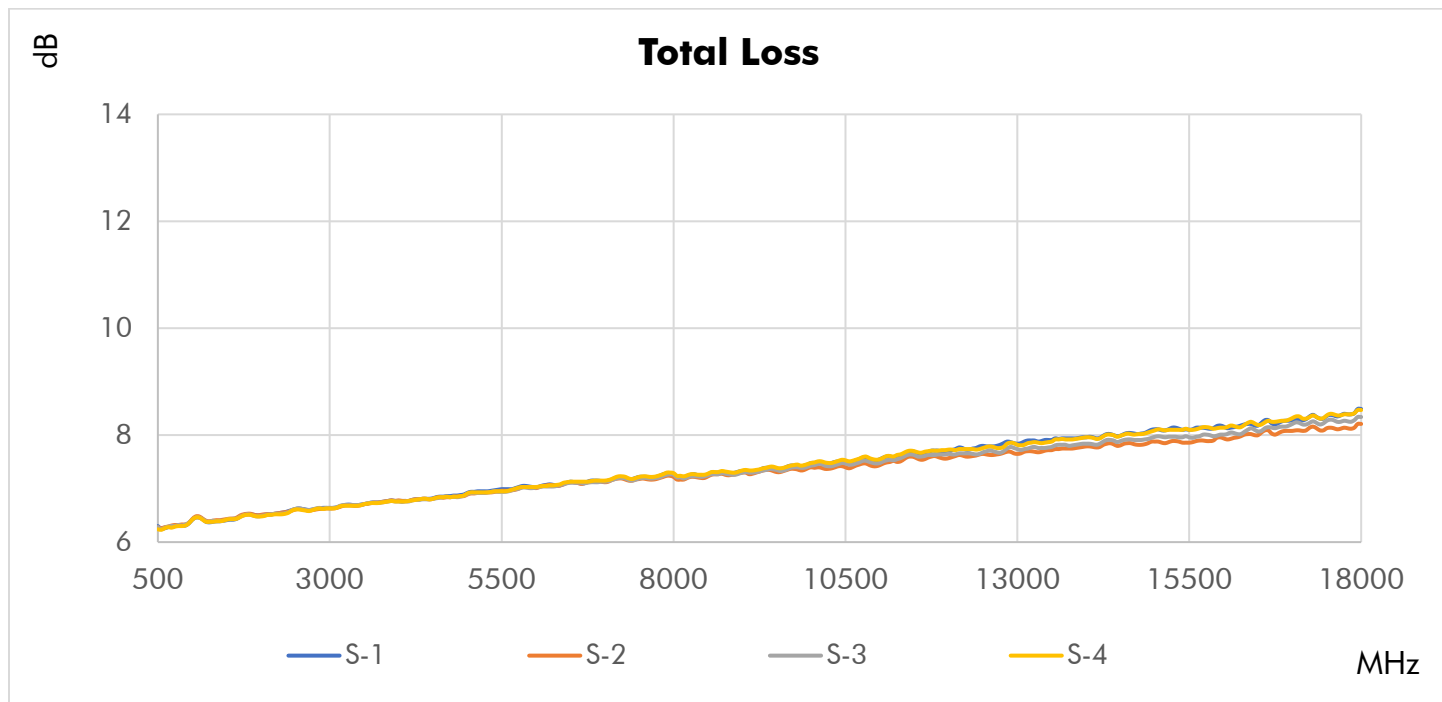
Parameter	Min.	Typ.	Max.	Unit
Frequency Range	500		18000	MHz
Impedance		50		Ω
Return Loss (Port S)	10	14		dB
Return Loss (Ports 1-4)	12	18		dB
Insertion Loss (above 6.02dB)	500-8000MHz	0.9	1.8	dB
	8000-12000MHz	1.4	2.8	
	12000-18000MHz	2.5	3.9	
Isolation	500-698MHz	12	14	dB
	698-18000MHz	14	20	dB
Amplitude Balance		0.3	1.9	dB
Phase Balance		2	16	Degree
Input Power (CW) ¹		20		W, max

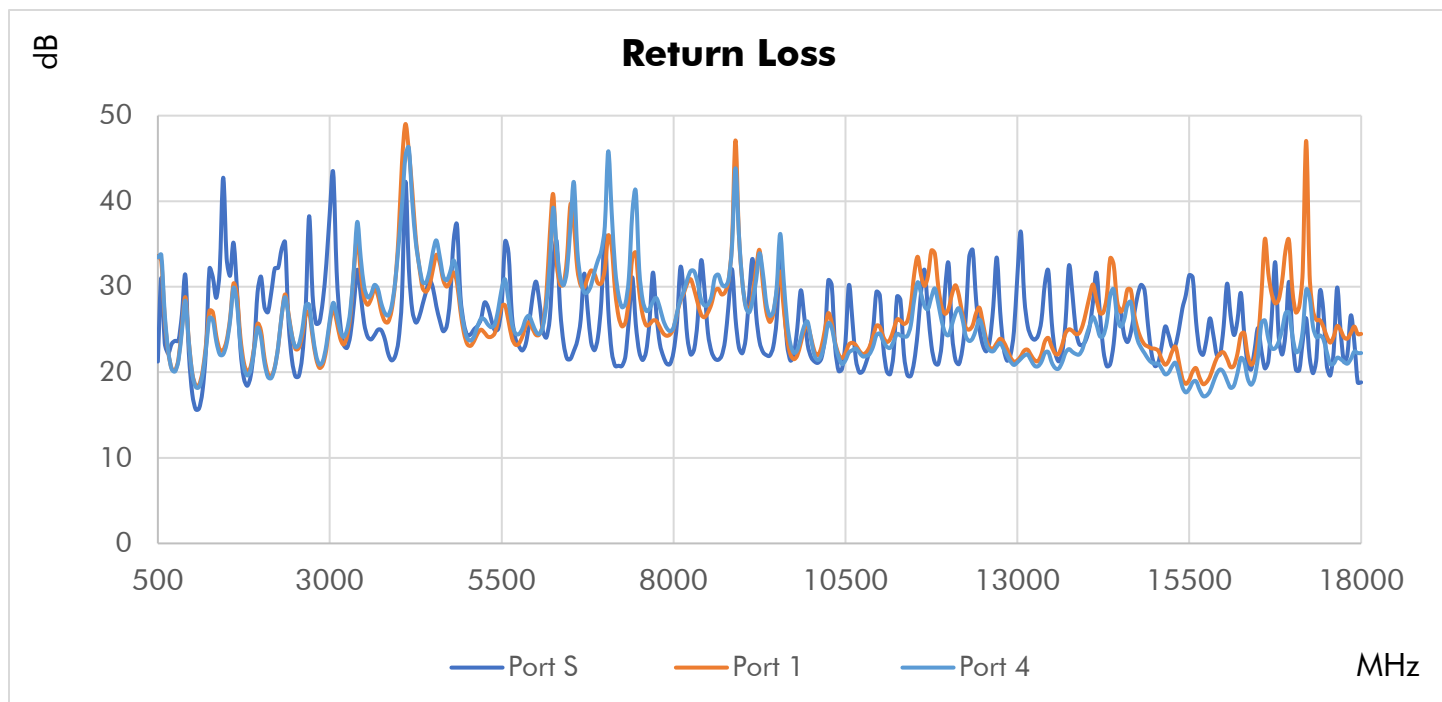
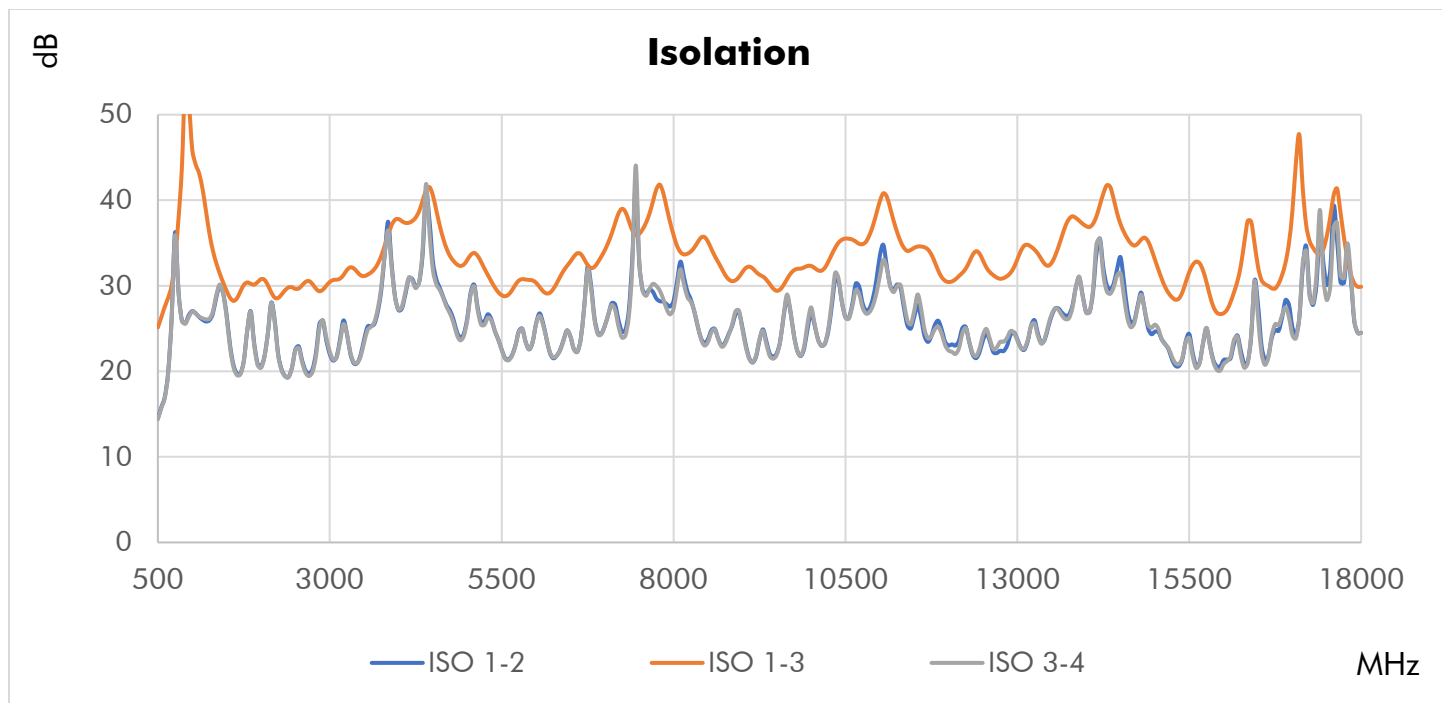
Connector Interface	SMA-Female
Operating Temperature ²	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Nominal Weight	410 g (14 oz)
Operating Humidity	10-90% (non-condensing)
Operating Environment	Indoor Use Only
HTSUS Code	8548.00.0000
ECCN	EAR99

RoHS Status ³	RoHS3 Compliant
REACH Status ³	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

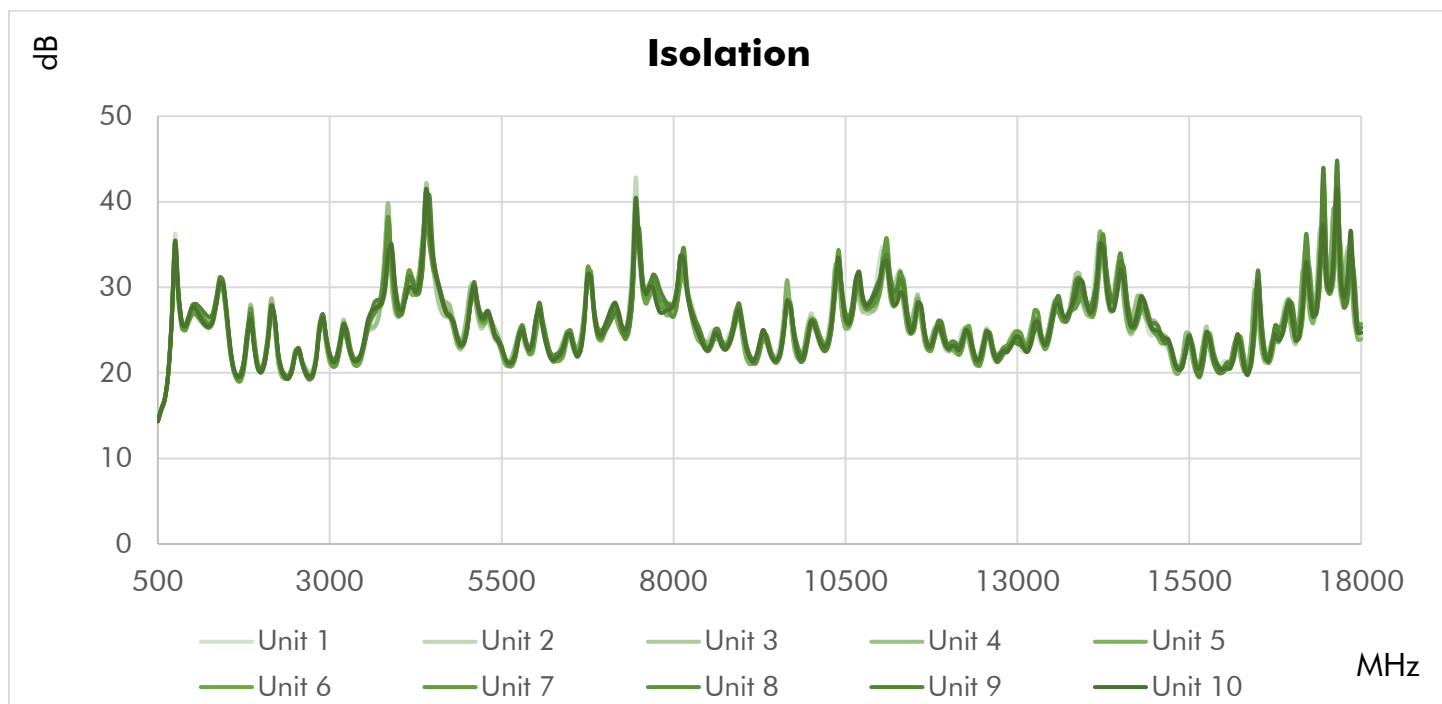
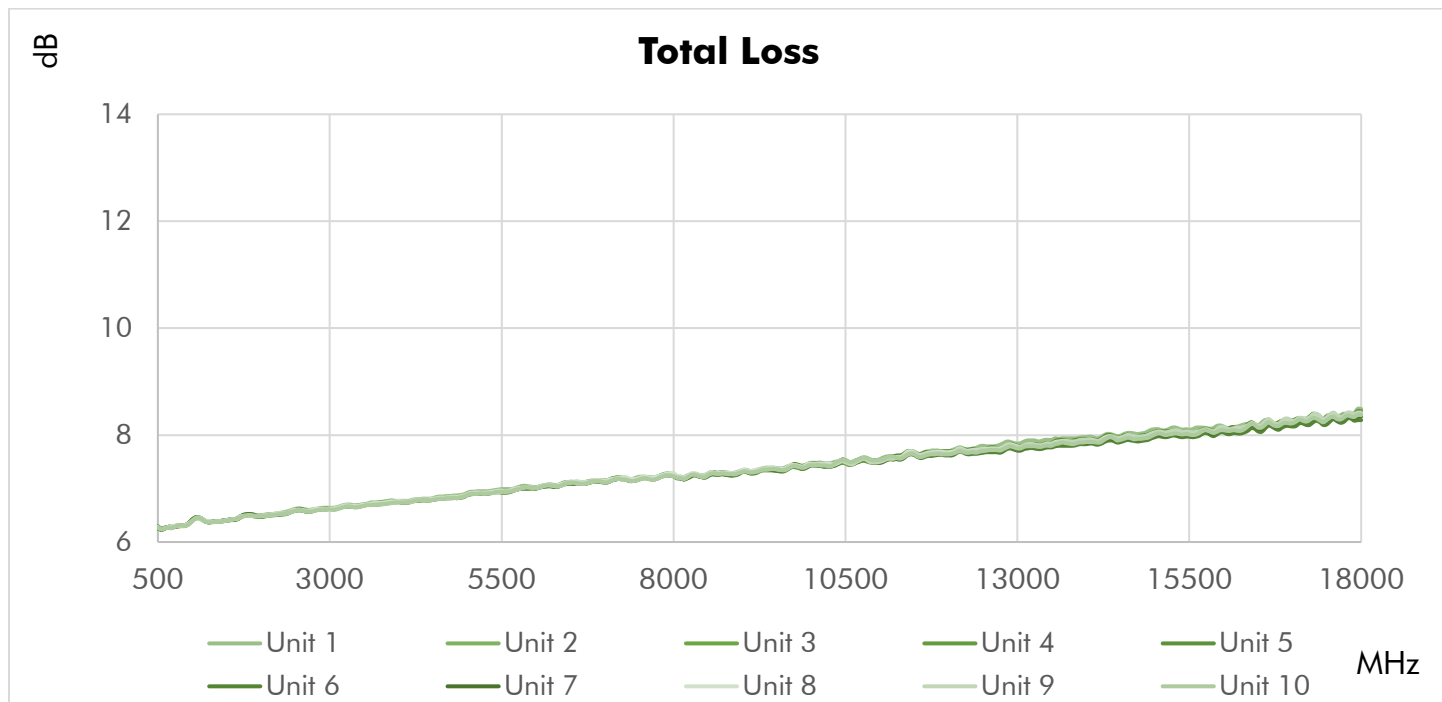
1. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
2. Electrical specification at +25 °C only.
3. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C





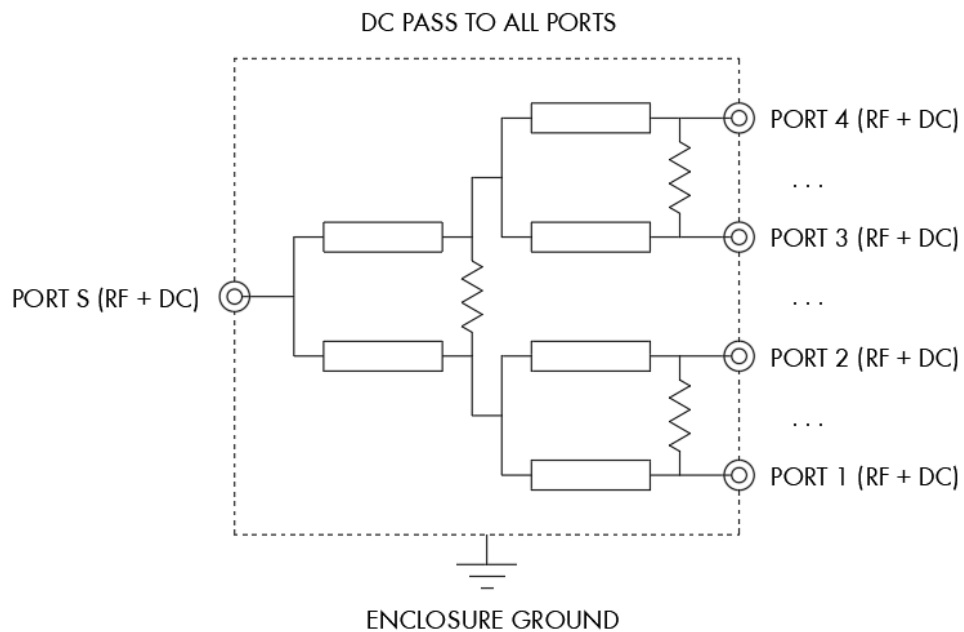
Repeatability in Production



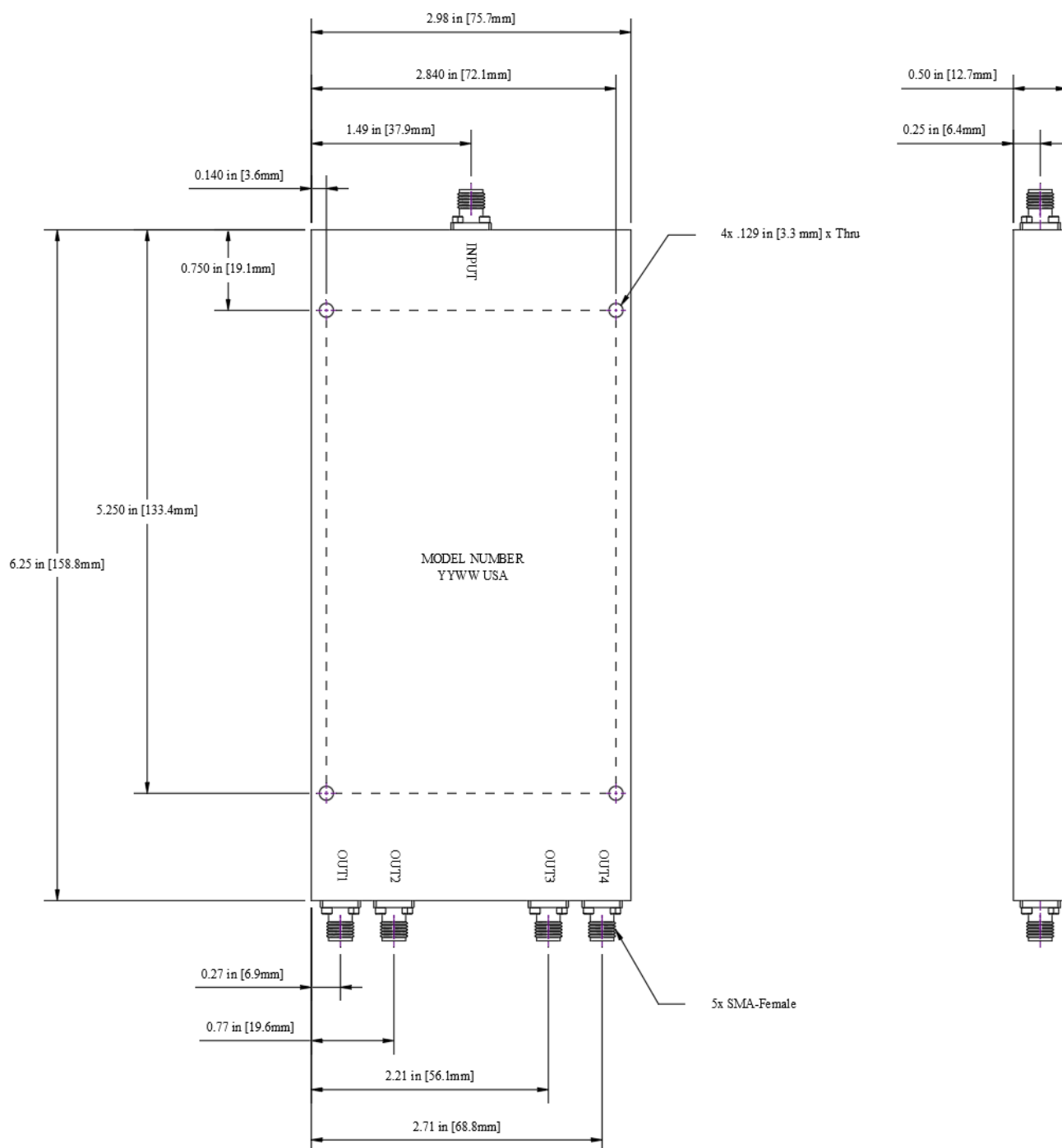
Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)
	Port S	Port 1	Port 4	S-1	S-4	
500	19.8	33.4	19.8	6.3	6.3	15.4
1000	18.1	23.2	18.1	6.4	6.4	26.6
1500	21.4	22.3	21.4	6.4	6.3	27.3
2000	25.0	24.7	25.0	6.5	6.5	20.2
2500	17.4	24.4	17.4	6.7	6.7	17.8
3000	20.9	23.4	20.9	6.7	6.6	20.5
3500	33.5	32.0	33.4	6.7	6.7	20.9
4000	16.7	35.9	16.7	6.8	6.8	23.3
4500	26.2	37.7	26.2	6.8	6.8	25.9
5000	32.3	27.8	32.1	6.8	6.8	22.9
5500	17.5	26.5	17.5	7.0	7.0	21.2
6000	28.1	31.3	28.0	7.0	7.0	19.8
6500	24.3	31.3	24.4	7.0	7.0	19.8
7000	19.6	29.5	19.6	7.1	7.1	22.1
7500	39.7	29.8	40.0	7.2	7.2	24.6
8000	23.0	31.6	23.1	7.2	7.3	23.9
8500	18.7	36.2	18.7	7.4	7.4	22.3
9000	37.8	30.6	38.0	7.3	7.4	20.8
9500	18.8	29.6	18.8	7.5	7.5	21.0
10000	18.6	22.2	18.6	7.4	7.4	20.2
10500	23.3	23.6	23.3	7.8	7.7	22.3
11000	15.2	22.6	15.2	7.6	7.7	22.5
11500	24.7	32.1	24.8	7.7	7.7	23.7
12000	23.0	29.3	23.0	7.8	7.8	19.7
12500	17.6	23.4	17.6	7.9	7.9	20.6
13000	24.5	23.4	24.4	8.1	8.1	19.4
13500	26.4	22.3	26.4	7.9	7.9	21.4
14000	18.9	25.6	18.9	8.2	8.2	21.9
14500	22.5	23.3	22.6	8.1	8.1	28.1
15000	20.7	19.7	20.7	8.3	8.3	21.0
15500	22.6	22.6	22.6	8.3	8.3	21.6
16000	29.1	25.3	29.0	8.3	8.3	18.8
16500	13.6	33.2	13.6	8.8	8.8	19.3
17000	18.7	23.4	18.7	8.6	8.6	18.8
17500	25.0	26.0	25.1	8.6	8.6	28.2
18000	15.9	21.5	15.9	8.9	8.9	21.2
18500	21.6	27.9	21.5	8.8	8.7	18.9
19000	27.7	17.4	27.6	8.6	8.7	19.0
19500	16.0	23.5	16.0	9.3	9.3	16.1
20000	22.3	23.6	22.2	9.1	9.1	18.1

Simplified Electrical Schematic



Outline Dimensions



Outline drawing: OL-4185

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

Tolerances on 2-pl decimals: $\pm .03$. 3-pl decimals: $\pm .015$. Angles: $\pm 1^\circ$.

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