

Power Divider, 2-way, 1-18GHz, SMA Female

WM2PD-1-18-S



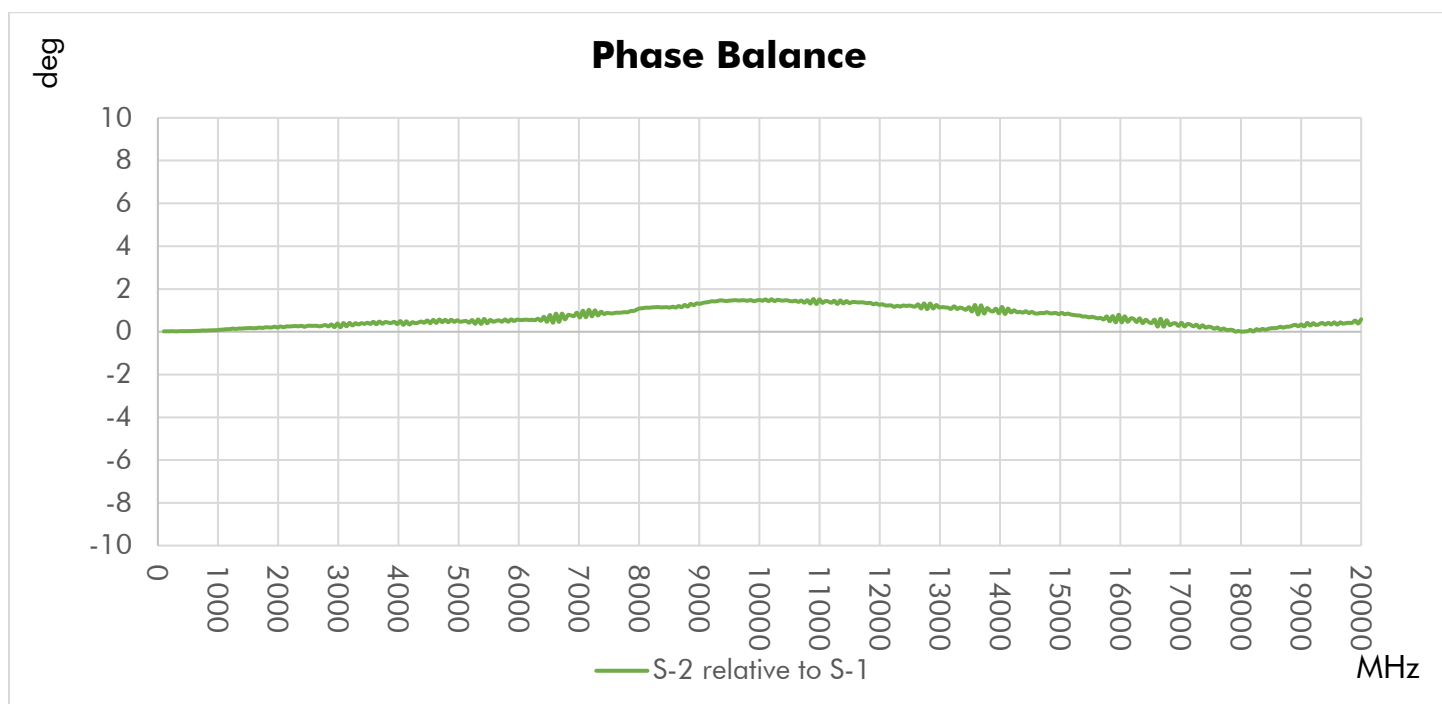
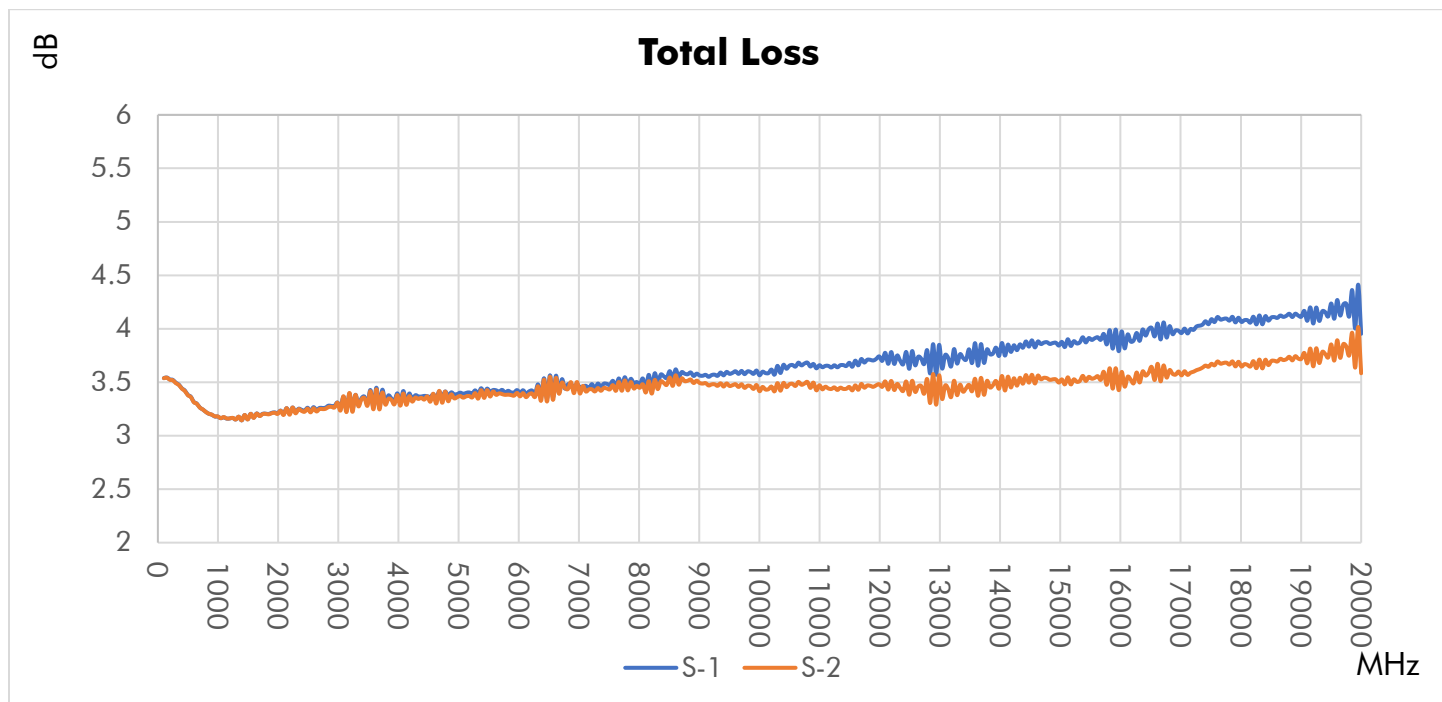
Parameter	Low Band	Mid Band	High Band	Unit
Frequency Range	950-2450	2450-8000	8000-18000	MHz
Impedance	50			Ω
Return Loss (Port S)	14	10	10	dB, min.
Return Loss (Port 1-2)	17	12	12	dB, min.
Insertion Loss above 3.01dB	0.5	0.8	1.4	dB, max.
Isolation	16	16	16	dB, min.
Amplitude Unbalance ($\pm$) ¹	0.3	0.6	0.9	dB, max.
Phase Unbalance ($\pm$) ¹	2	4	6	Degree, max.
Input Power (CW) ²	30			W, max.
Combining Power (CW) ²	0.05			W/port, max.
DC Current	0.3			A/port, max.

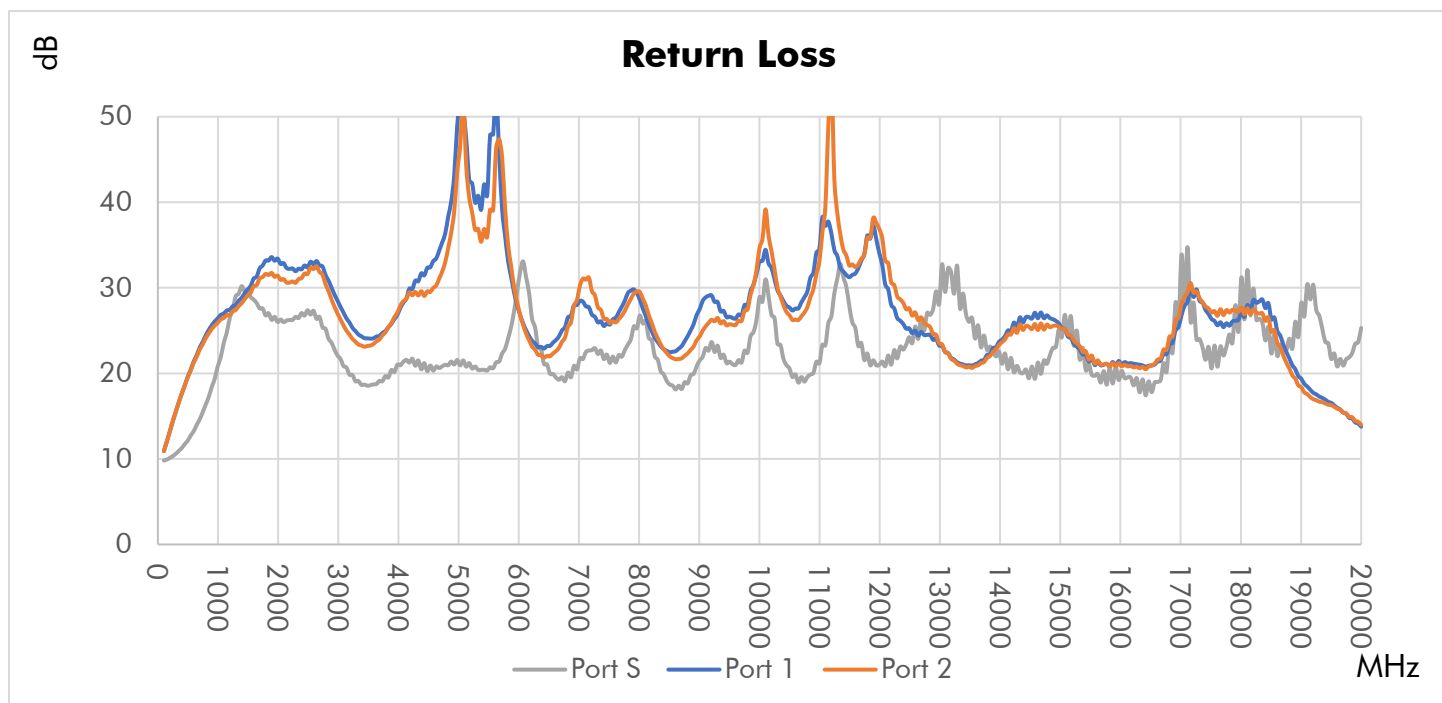
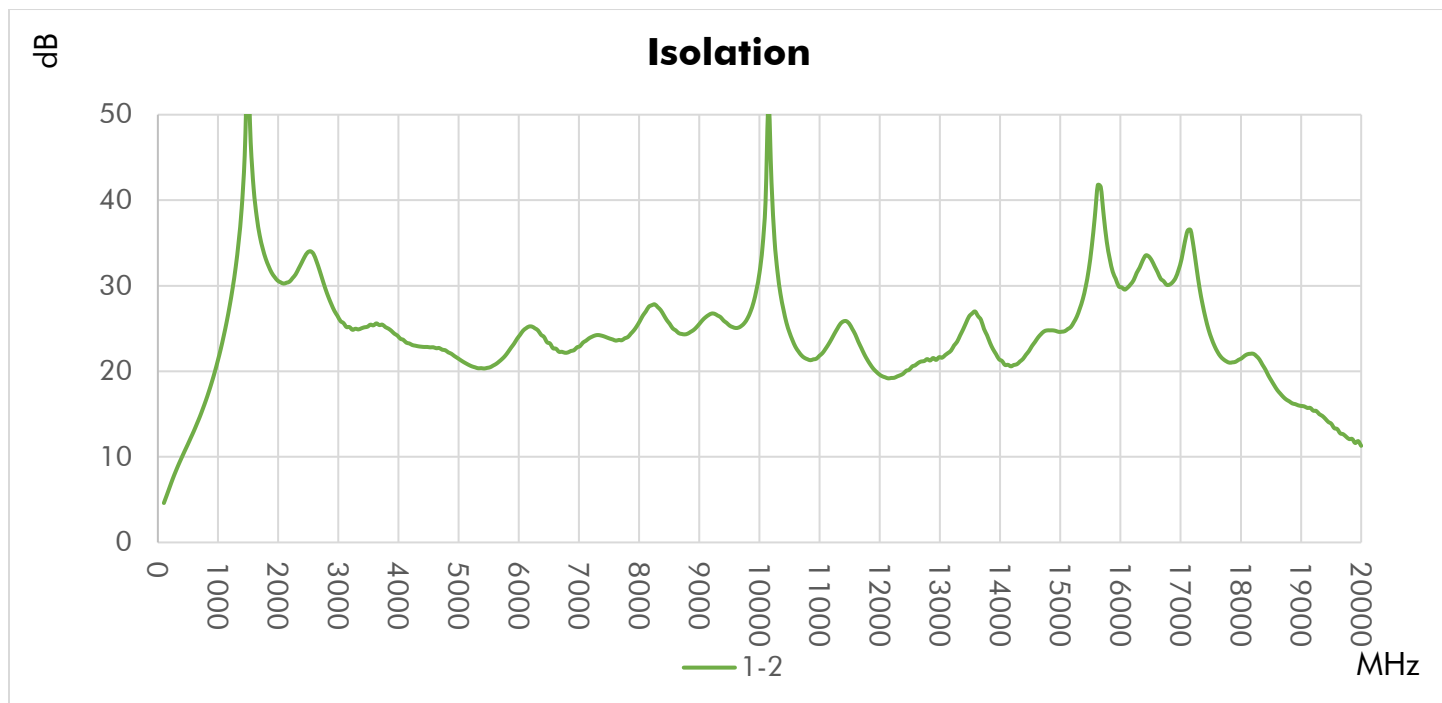
Connector Interface	SMA Female
Operating Temperature ³	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Nominal Weight	74 g (2.6 oz)
Operating Humidity	10-90% (non-condensing)
Operating Environment	Indoor Use Only
HTSUS Code	8548.00.0000
ECCN	EAR99

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
Country of Origin	United States of America

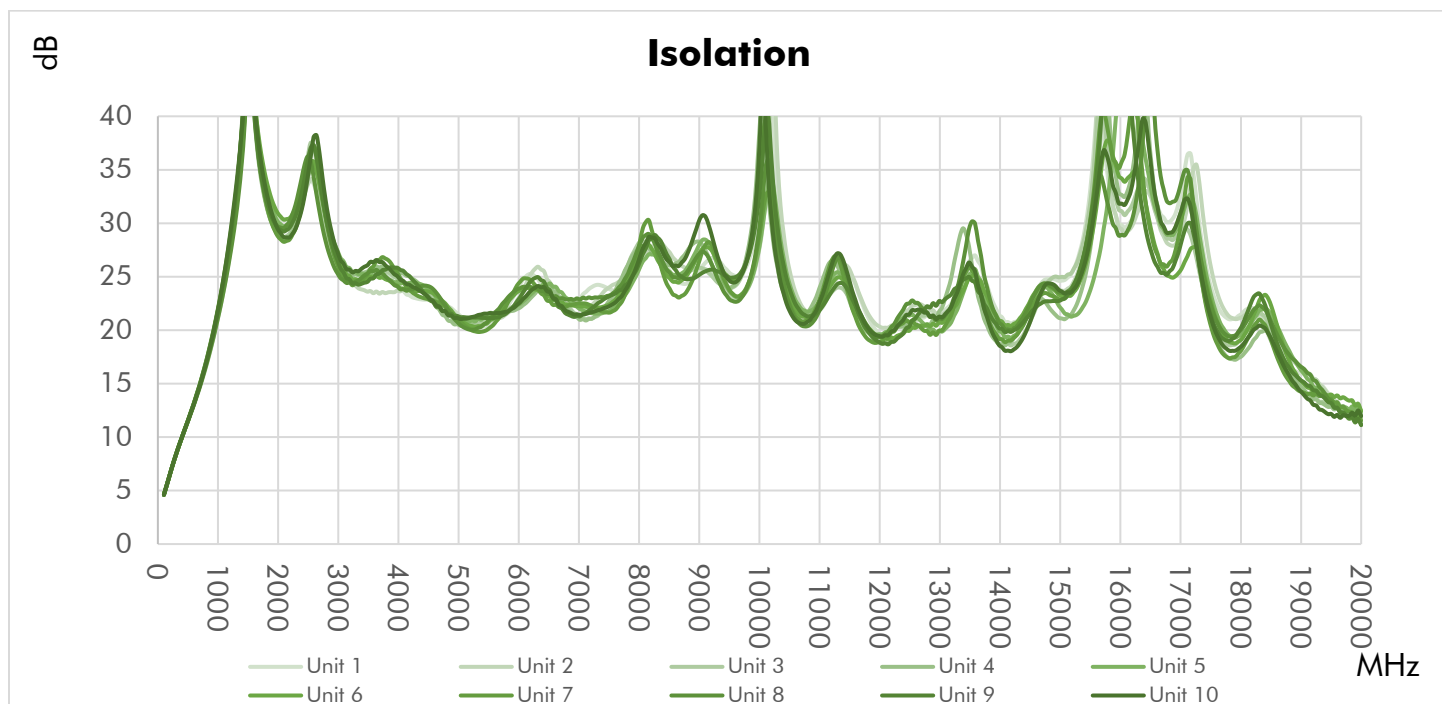
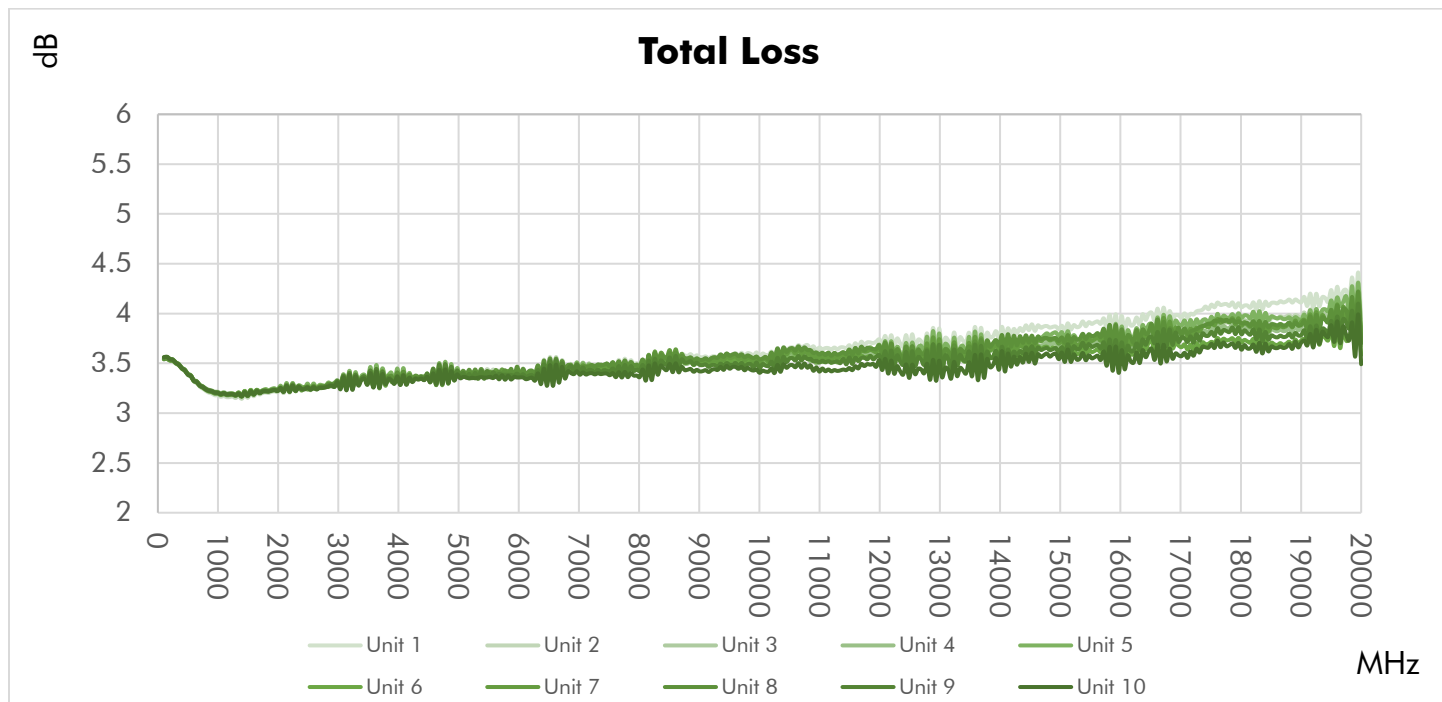
1. With reference to average.
2. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
3. Electrical specifications are tested at +25 °C.
4. To the best of our knowledge at the time of publication.

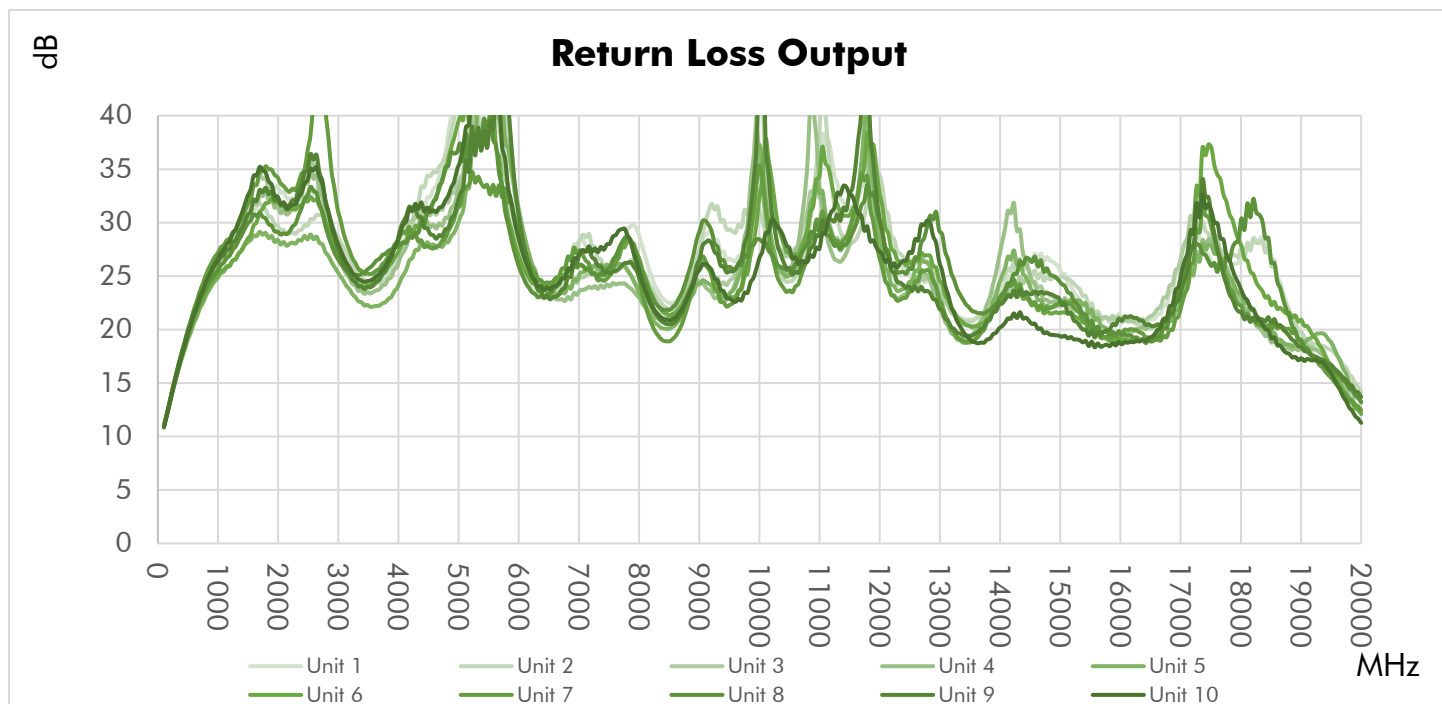
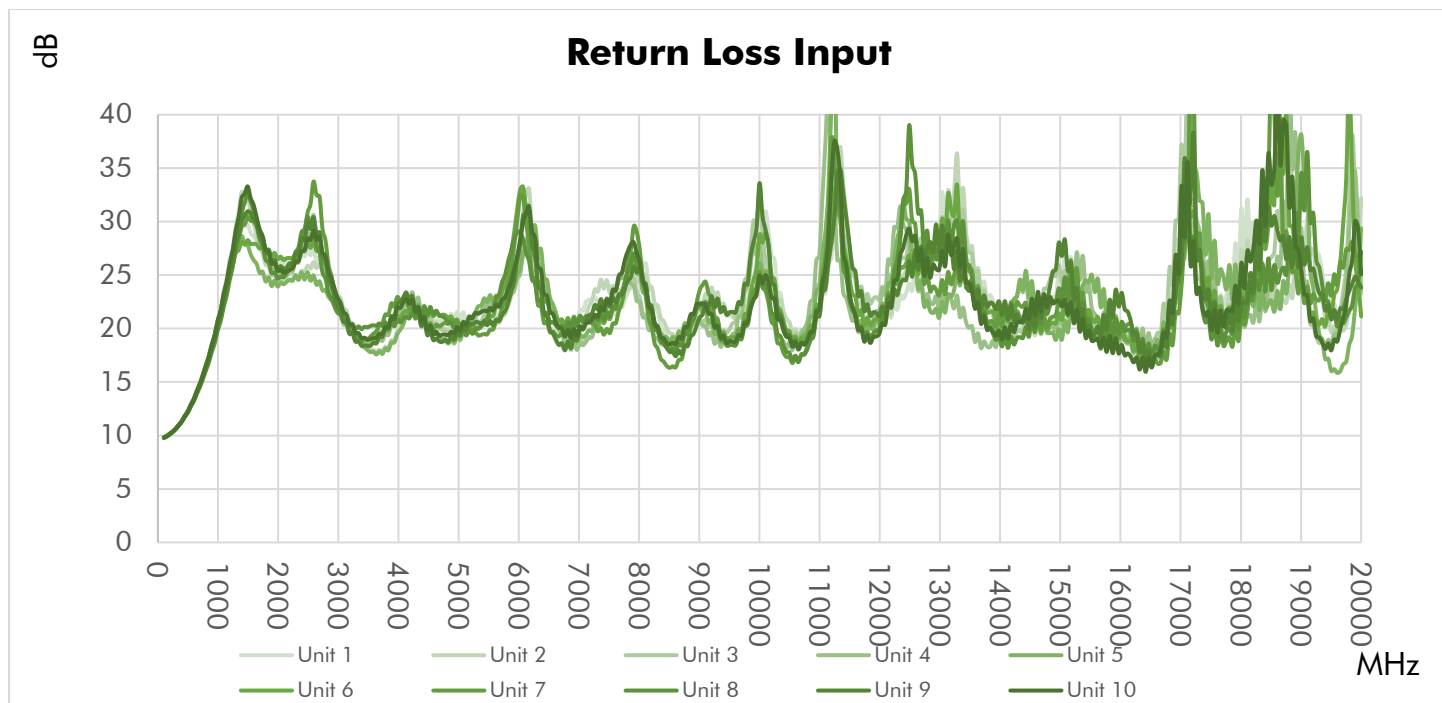
Typical Performance at +25 °C





Repeatability in Production

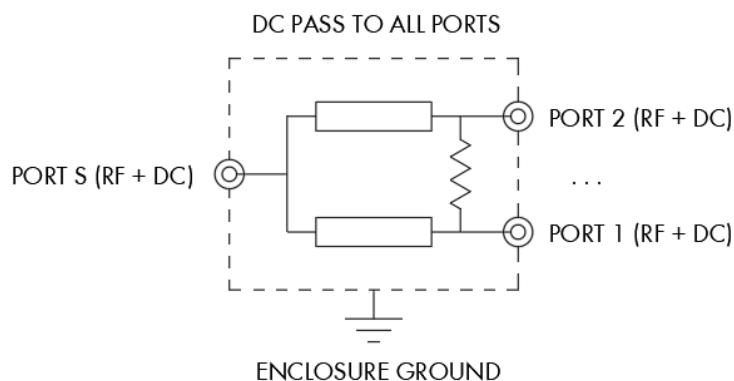




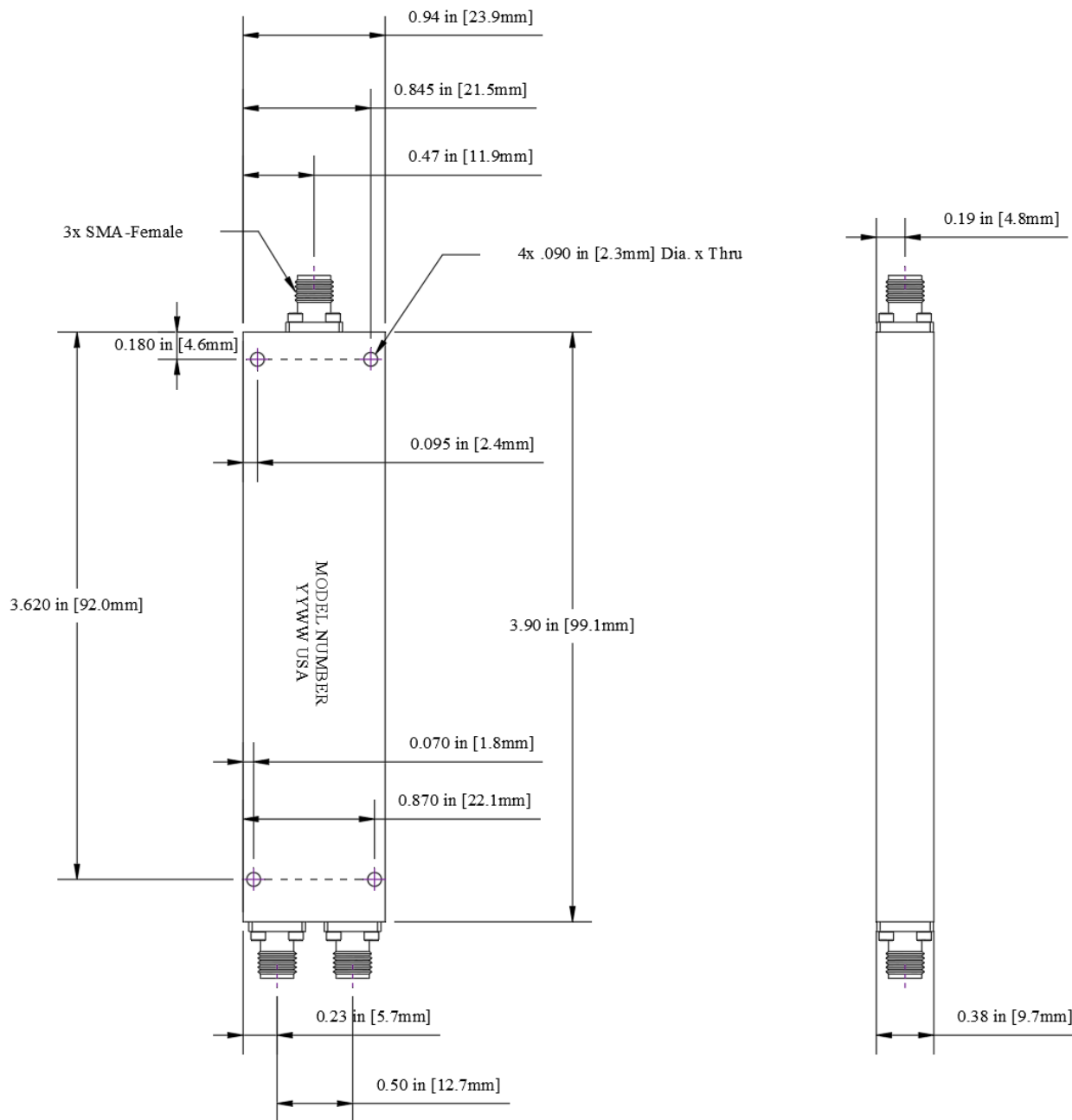
Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)
	Port S	Port 1	Port 2	S-1	S-2	
100	9.80	10.91	10.91	3.54	3.54	4.61
299	10.60	15.53	15.53	3.50	3.49	8.35
498	12.15	19.63	19.56	3.38	3.38	11.46
697	14.66	23.05	22.81	3.26	3.26	14.68
896	18.41	25.61	25.18	3.20	3.20	18.72
1095	23.55	26.99	26.46	3.17	3.17	24.15
1294	29.01	27.99	27.40	3.15	3.15	32.19
1493	29.73	29.81	29.10	3.15	3.15	55.74
1692	27.58	32.27	31.09	3.19	3.18	35.90
1891	26.25	33.59	31.74	3.21	3.21	31.53
2090	25.98	32.89	31.01	3.20	3.19	30.26
3085	20.87	27.11	25.62	3.36	3.37	25.64
4080	21.35	28.26	28.43	3.42	3.40	23.68
5075	21.51	50.70	52.33	3.39	3.36	21.11
6070	33.09	25.85	25.70	3.43	3.40	24.75
7065	21.67	28.37	31.07	3.46	3.47	23.36
8060	25.82	27.58	28.72	3.54	3.48	26.51
9055	21.93	28.46	24.97	3.56	3.49	26.00
10050	28.38	33.17	35.75	3.60	3.46	34.55
11045	23.34	38.24	36.50	3.64	3.43	22.12
12040	21.39	32.68	35.79	3.70	3.46	19.42
13035	32.76	23.23	23.38	3.63	3.34	21.59
14030	21.11	23.93	23.64	3.87	3.56	21.21
15025	24.22	25.22	25.16	3.88	3.53	24.64
16020	20.28	21.02	20.82	3.98	3.60	29.81
17015	33.88	26.83	28.15	3.96	3.56	33.13
18010	31.22	27.24	27.70	4.06	3.65	21.51
19005	28.24	19.37	18.38	4.11	3.72	15.95
20000	25.31	13.77	13.99	3.95	3.58	11.29

Simplified Electrical Schematic



Outline Dimensions



Outline drawing: OL-2181

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

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

The information contained in this document is accurate to the best of our knowledge and representative of the product described herein at the date of publication. It may be necessary to make modifications to the product and/or documentation of the product. Werbel Microwave LLC reserves the right to make such changes as required without notice. Unless otherwise stated, all specifications and dimensions are nominal. Werbel Microwave LLC does not make any representation or warranty regarding the suitability of the product described herein for any particular purpose or application, and Werbel Microwave LLC does not assume any liability arising out of the use of any part of documentation. This document gives only a description of the product(s) and shall not form part of any contract. Please contact a Werbel Microwave LLC Applications Engineer for the most current specification drawing.

Reliability testing was performed as an internal requalification of the product to substantiate the published specifications, which were previously arrived at by calculation and/or similarity to existing products. The results of these tests are provided as a courtesy and shall not form part of a contract or warranty. While reliability tests may depict the product being tested beyond the published specification ratings for the purpose of stress testing the product, this does not imply that the product should be operating above the rated limits for any length of time. Specifications related to reliability (e.g., performance over temperature, power handling, DC current, HI-POT) are "designed to meet" and are not individually tested in production of commercially available products. Please contact a Werbel Microwave LLC Applications Engineer if specific reliability testing is needed on a particular product.