Power Divider, 2-way, 0.5-26.5GHz, SMA Female

WM2PD-0.5-26-S

Description

Model WM2PD-0.5-26-S from Werbel Microwave is a wideband 2-way in-line power splitter covering of 500 MHz to 26.5 GHz with excellent return loss, low insertion loss, and high isolation performance. With ultrawideband performance, amplitude balance is typically 0.24dB and phase unbalance is typically 2.6deg. Insertion loss is low for the bandwidth, coming in at a typical 1.2dB above 3dB splitting loss. Return loss 16dB typical. Isolation 18dB typical. The device is precision-assembled and tested in the USA.

Image is representative.

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range	--	500	--	26500	MHz
Impedance	--	--	50	--	Ω
Return Loss (Port S)	500-8000 8000-18000 18000-26500	12 12 12	20 14 16	--	dB
Return Loss (Port 1-2)	500-8000 8000-18000 18000-26500	14 13 12	16 15 14	--	dB
Insertion Loss Above 3.0dB	500-8000 8000-18000 18000-26500	--	0.6 1.2 1.8	1.1 1.8 2.3	dB
Isolation	500-1000 1000-18000 18000-26500	14 16 14	16 21 18	--	dB
Amplitude Unbalance (±)[1]	500-8000 8000-18000 18000-26500	--	0.06 0.24 0.36	0.20 0.45 0.60	dB
Phase Unbalance (±)[1]	500-8000 8000-18000 18000-26500	--	1.5 2.6 3.4	3.0 5.0 6.0	Degree
Input Power (CW)[2]	--	--	--	10	W

Mechanical

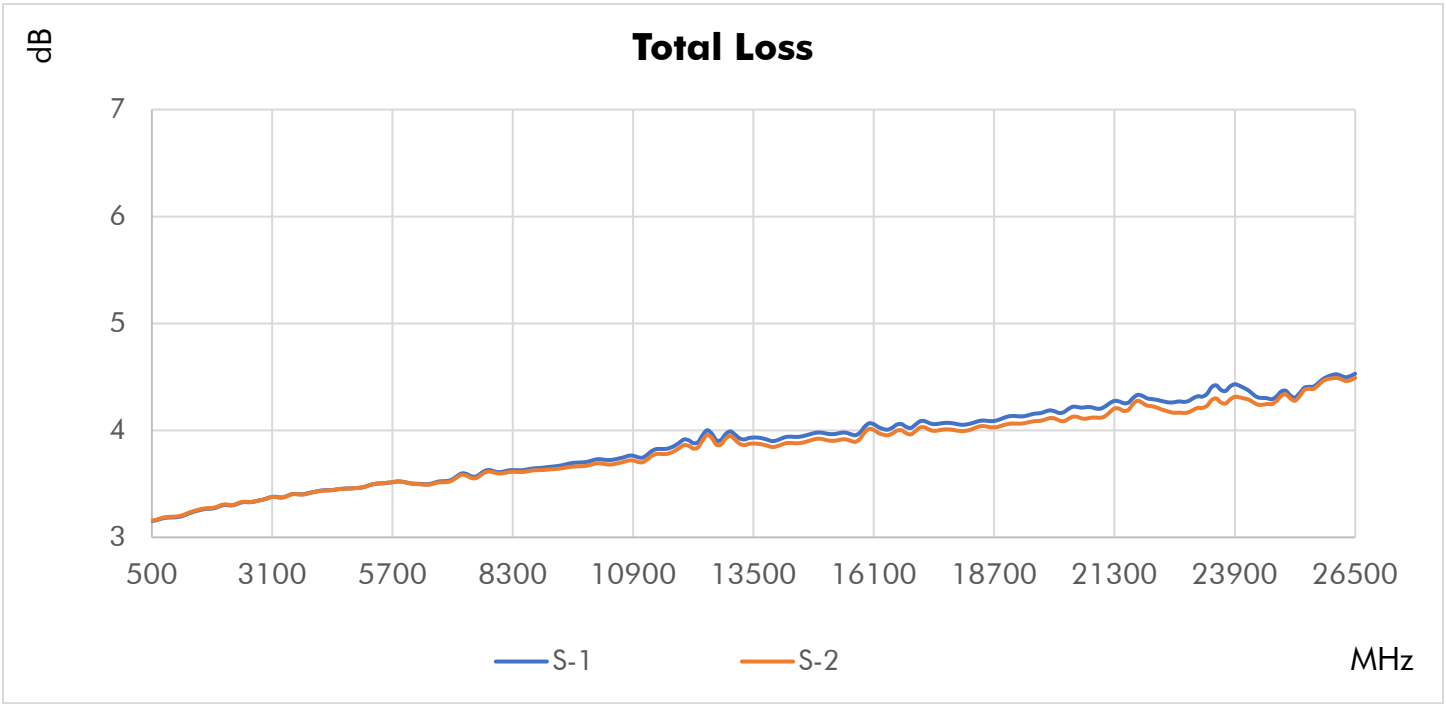
Connector Interface	SMA-Female
Operating Temperature[3]	-55 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	141g (4.97 oz)
Humidity	10-90% non-condensing
Environment	Indoors Use Only
CAGE Code	78YZ0

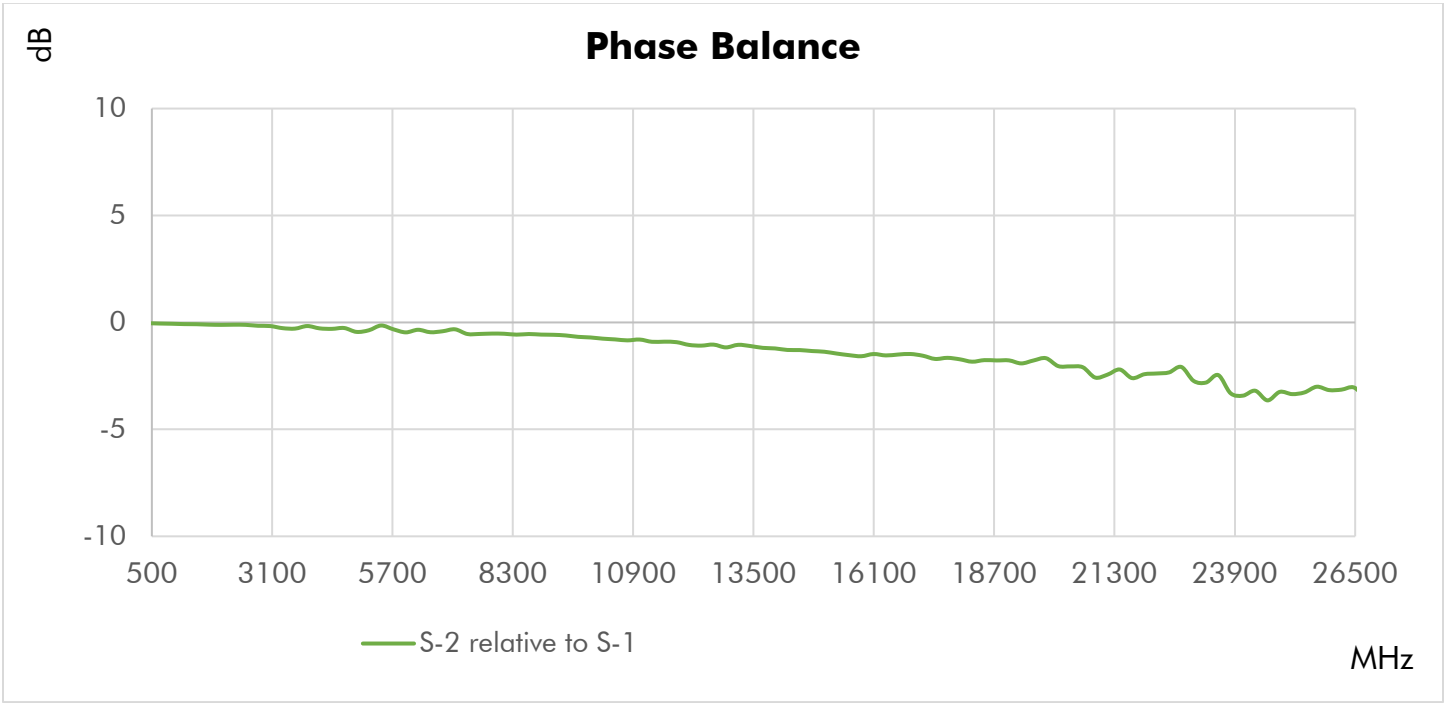
Materials

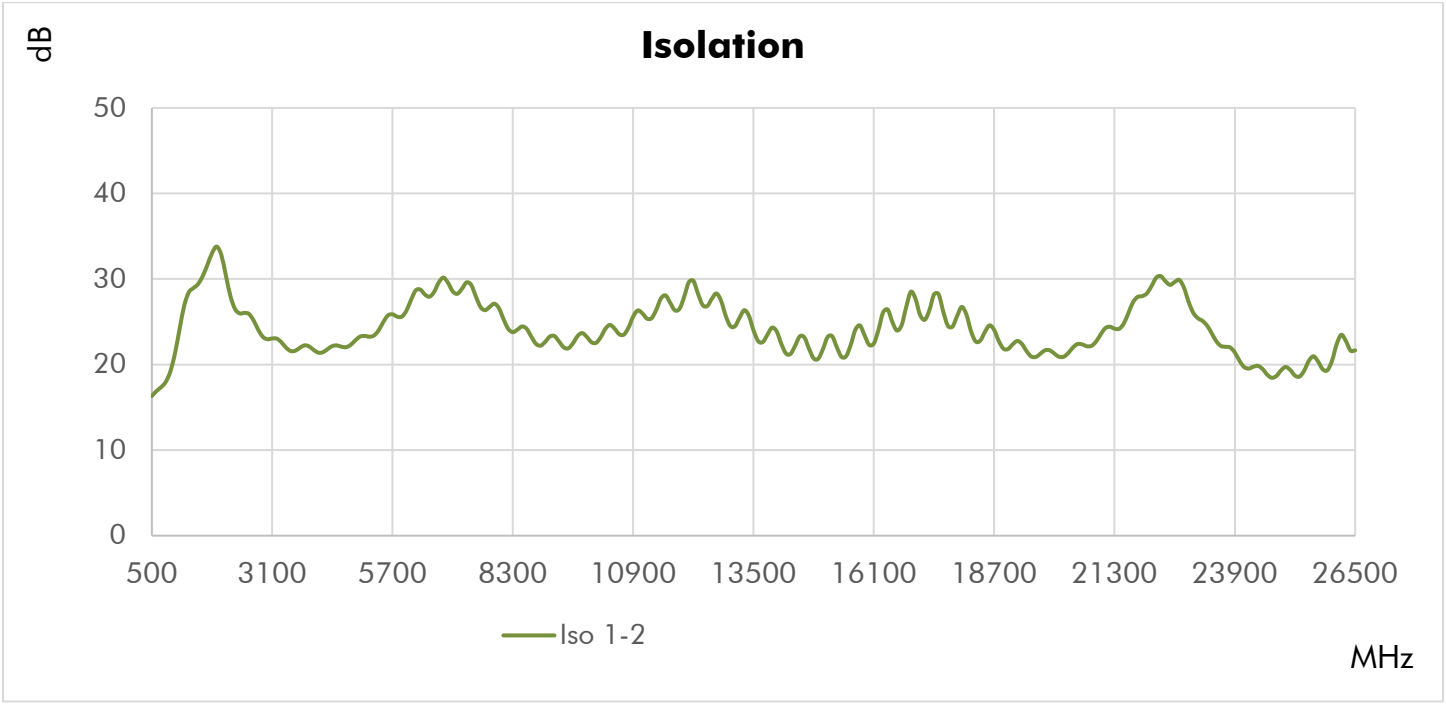
RoHS Compliant[4]	Yes
REACH Compliant[4]	Yes
Enclosure	Aluminum
Connectors	Stainless Steel
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Green Paint

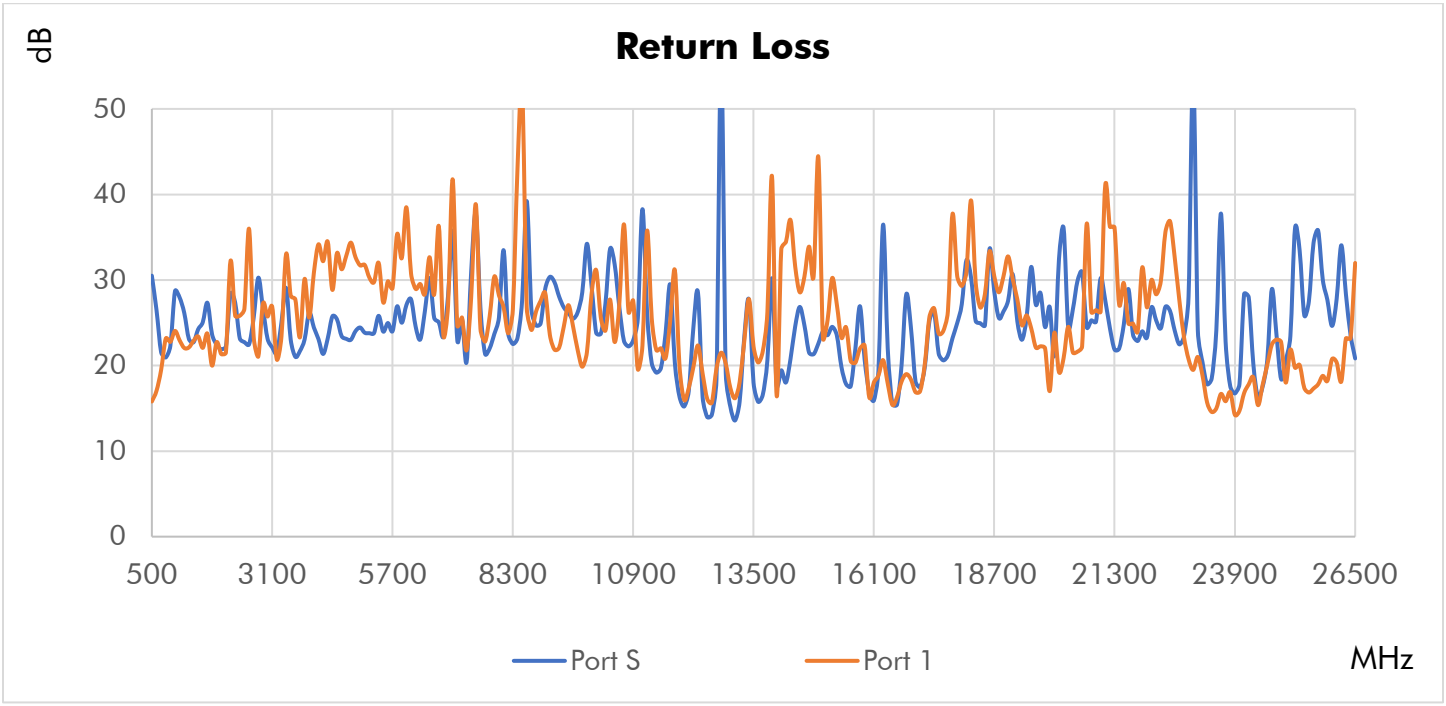
1. With reference to average.
2. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
3. Electrical specifications at +25 °C.
4. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C

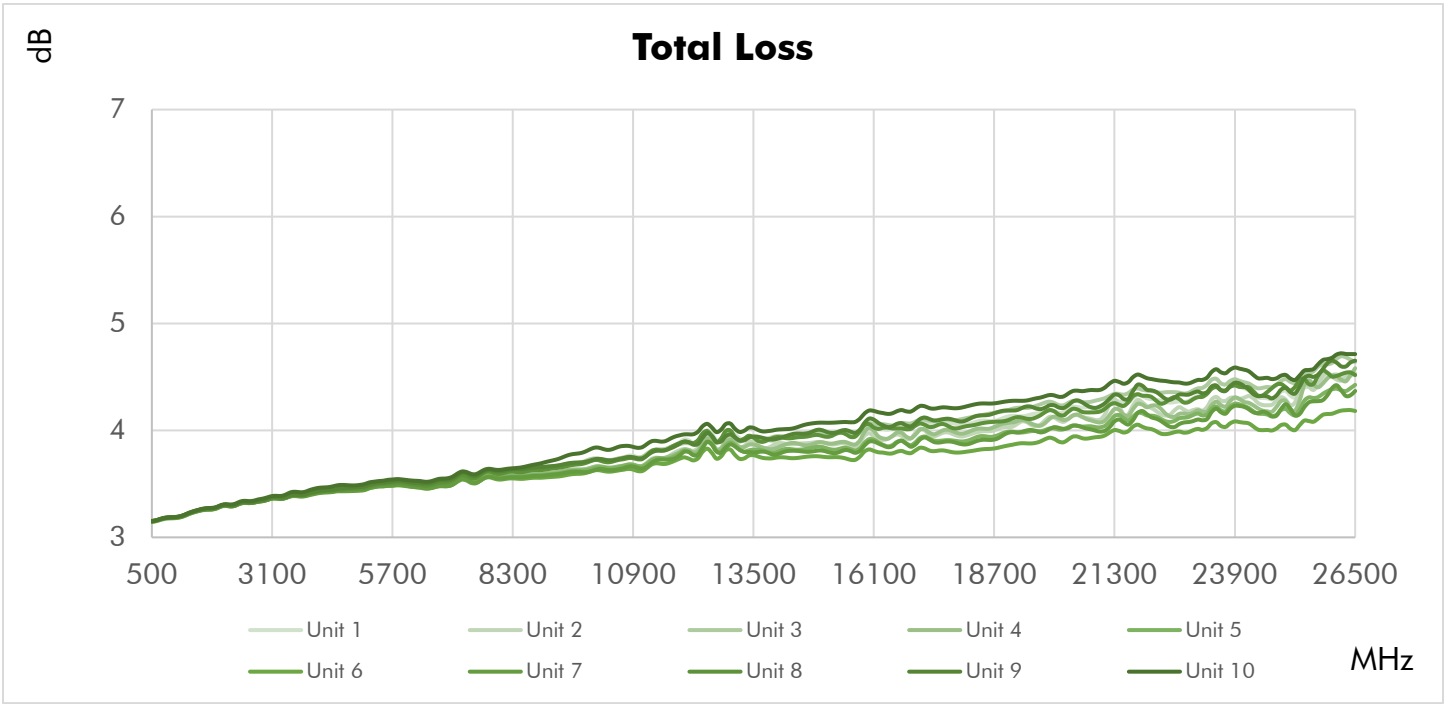


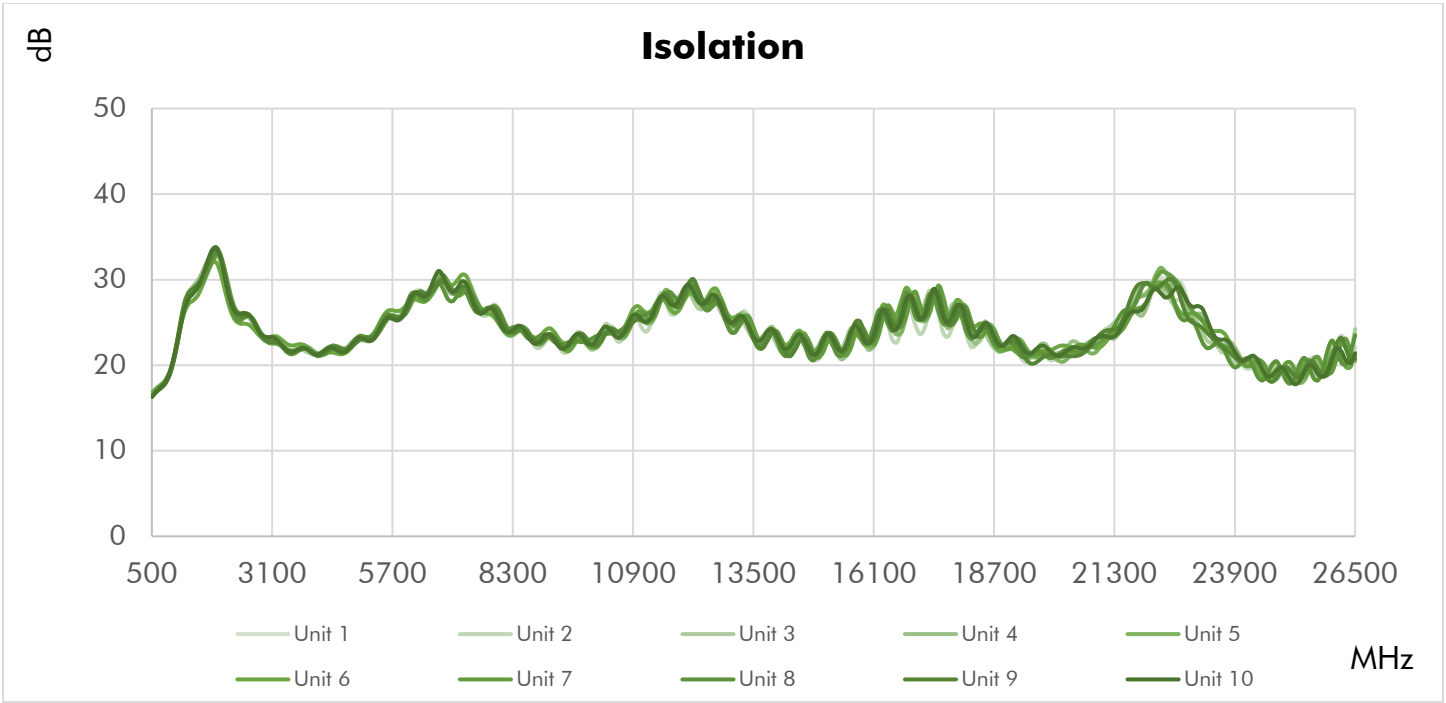



Isolation
dB
50
40
30
20
10
0
500
3100
5700
8300
10900
13500
16100
18700
21300
23900
26500
Iso 1-2
MHz


Return Loss
dB
50
40
30
20
10
0
500
3100
5700
8300
10900
13500
16100
18700
21300
23900
26500
Port S
Port 1
MHz

Repeatability in Production

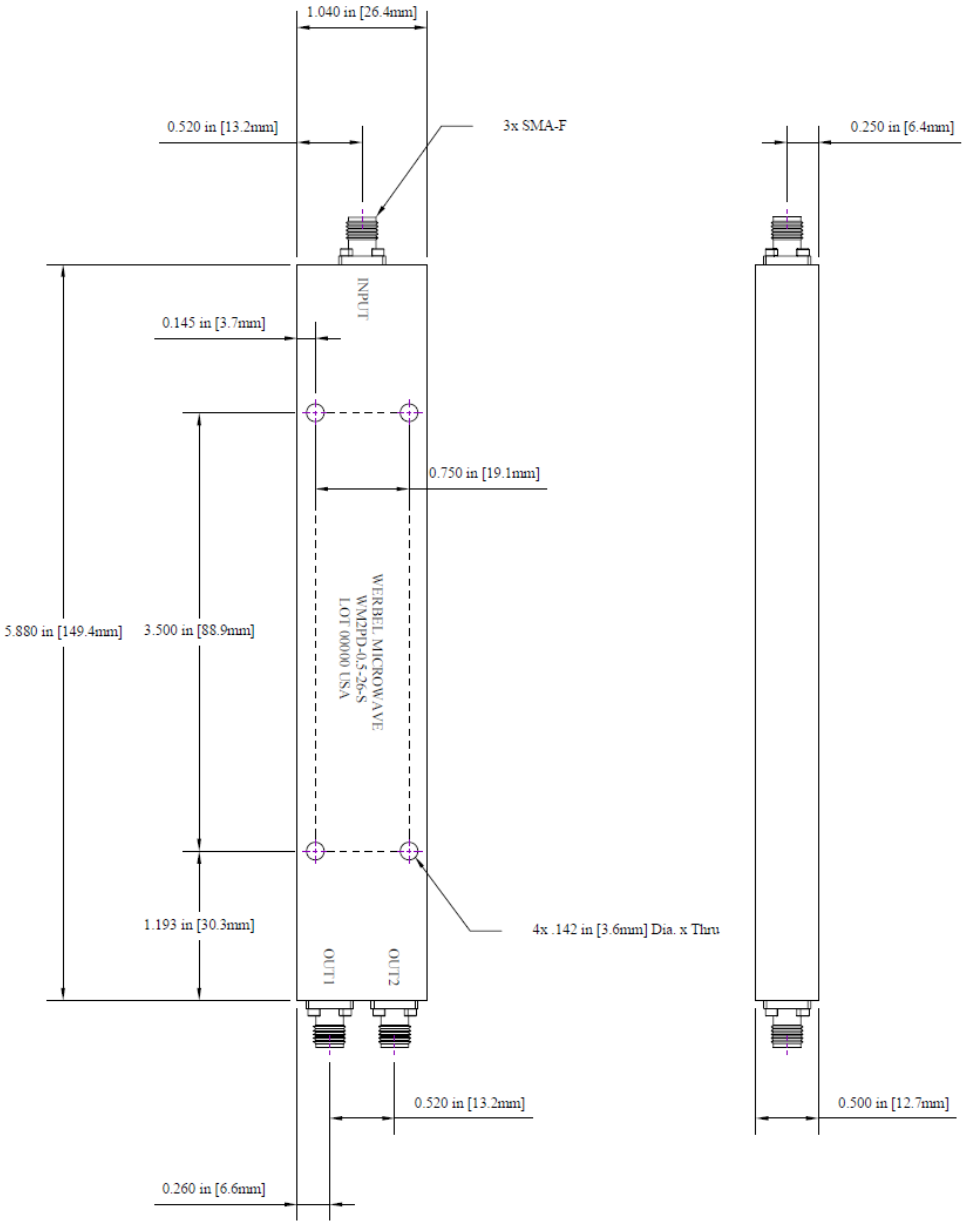




Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)
	Port S	Port 1	Port 2	S-1	S-2	1-2
500	31.48	15.79	15.71	3.13	3.14	17.42
600	24.36	16.93	16.77	3.14	3.15	17.44
700	20.64	18.99	18.73	3.15	3.17	17.57
800	20.32	21.76	21.39	3.16	3.18	18.01
900	22.60	24.32	23.82	3.16	3.18	19.15
1000	28.79	24.46	24.02	3.16	3.18	21.17
1500	25.29	23.48	23.50	3.22	3.23	28.98
2000	22.97	21.41	21.54	3.27	3.28	32.58
2500	21.94	22.16	22.24	3.28	3.30	25.40
3000	23.50	26.02	25.82	3.30	3.31	22.79
3500	22.86	30.75	30.30	3.34	3.35	21.46
4000	22.48	36.80	38.47	3.36	3.37	21.08
4500	23.94	29.52	30.32	3.38	3.39	21.88
5000	25.11	29.21	29.92	3.39	3.39	23.00
5500	26.72	32.50	32.51	3.40	3.39	24.74
6000	24.52	33.71	31.62	3.41	3.40	26.21
6500	23.14	29.07	28.73	3.42	3.41	28.10
7000	22.43	29.77	29.83	3.44	3.43	27.93
7500	23.66	34.60	33.19	3.46	3.44	26.85
8000	27.71	30.83	29.26	3.44	3.43	25.73
8500	40.65	27.55	25.82	3.46	3.44	24.31
9000	30.09	26.89	25.48	3.47	3.46	22.83
9500	27.56	31.01	28.41	3.50	3.48	21.80
10000	26.81	29.92	29.71	3.53	3.50	21.52
11000	39.53	26.40	26.81	3.60	3.56	25.53
12000	20.12	22.21	21.71	3.72	3.67	28.23
13000	16.22	19.84	18.90	3.87	3.84	24.66
14000	19.92	25.88	24.83	3.86	3.80	23.14
15000	29.45	26.67	25.07	3.89	3.83	22.13
16000	21.36	27.27	24.69	3.97	3.93	21.45
17000	21.35	27.92	24.45	3.99	3.94	26.20
18000	30.30	28.83	26.00	4.02	3.97	26.85
19000	21.26	26.69	24.03	4.09	4.06	22.16
20000	23.43	30.60	36.36	4.19	4.13	20.75
21000	27.82	25.28	31.89	4.16	4.11	22.18
22000	24.77	29.42	25.85	4.27	4.23	27.92
23000	30.46	27.93	34.30	4.32	4.24	25.21
24000	28.67	21.23	25.98	4.38	4.31	21.37
25000	24.08	30.23	30.32	4.33	4.37	19.60
26000	32.93	25.89	23.55	4.48	4.51	20.19
26500	29.73	27.25	25.20	4.50	4.55	20.06

Outline Dimensions



Outline drawing: OL-2300
Dimensions are in inches, [mm] shown for convenience.
Tolerances on 2-pl decimals: ±.03. 3-pl decimals: ± .015.

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