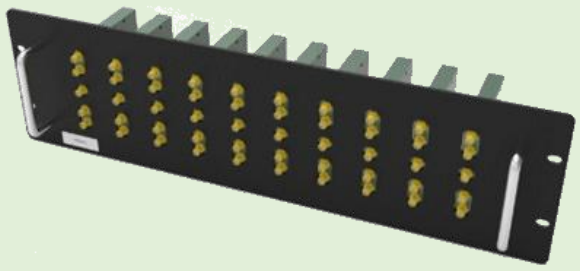
WERBEL MICROWAVE LLC
628 State Route 10, Unit 14
Whippany, N.J. 07981
www.WerbelMicrowave.com

10 Count, 1:4 Passive Divider/Combiner, 4U Rack Mount

WMU-107

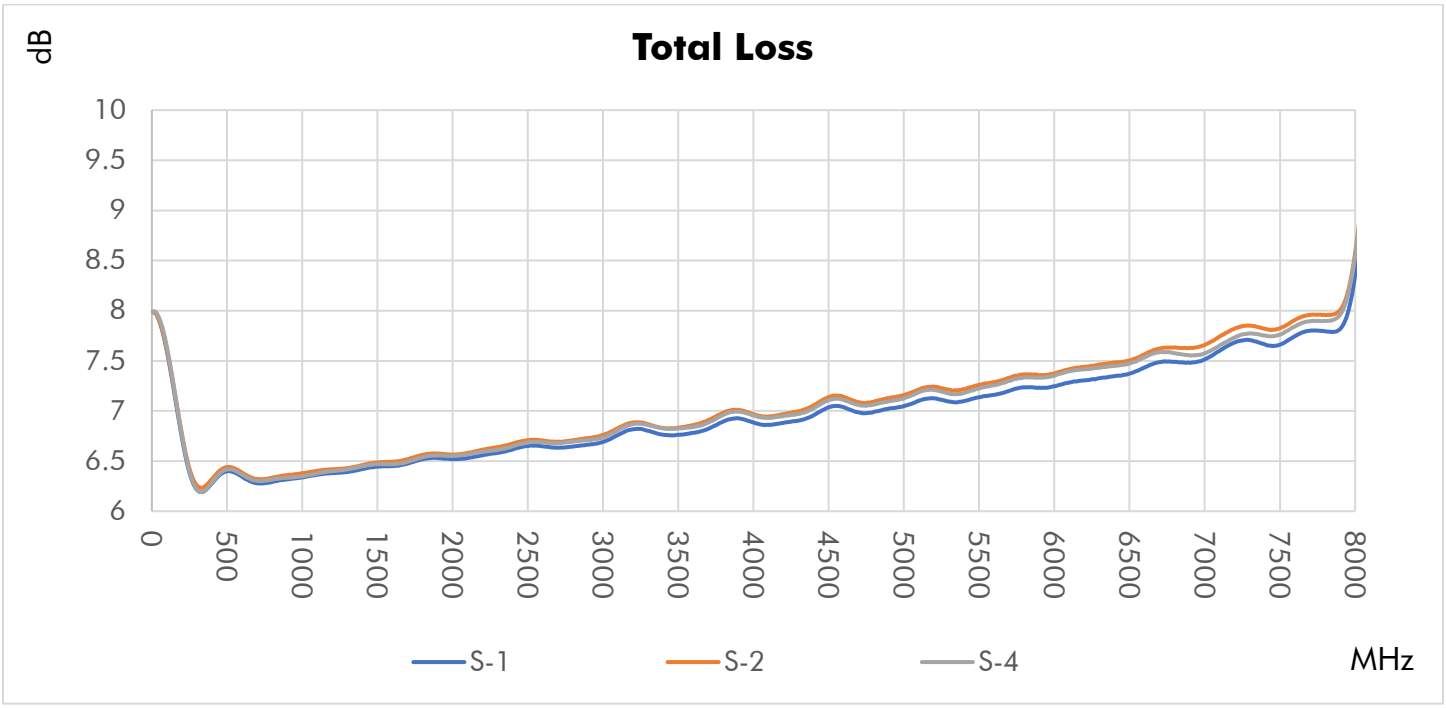


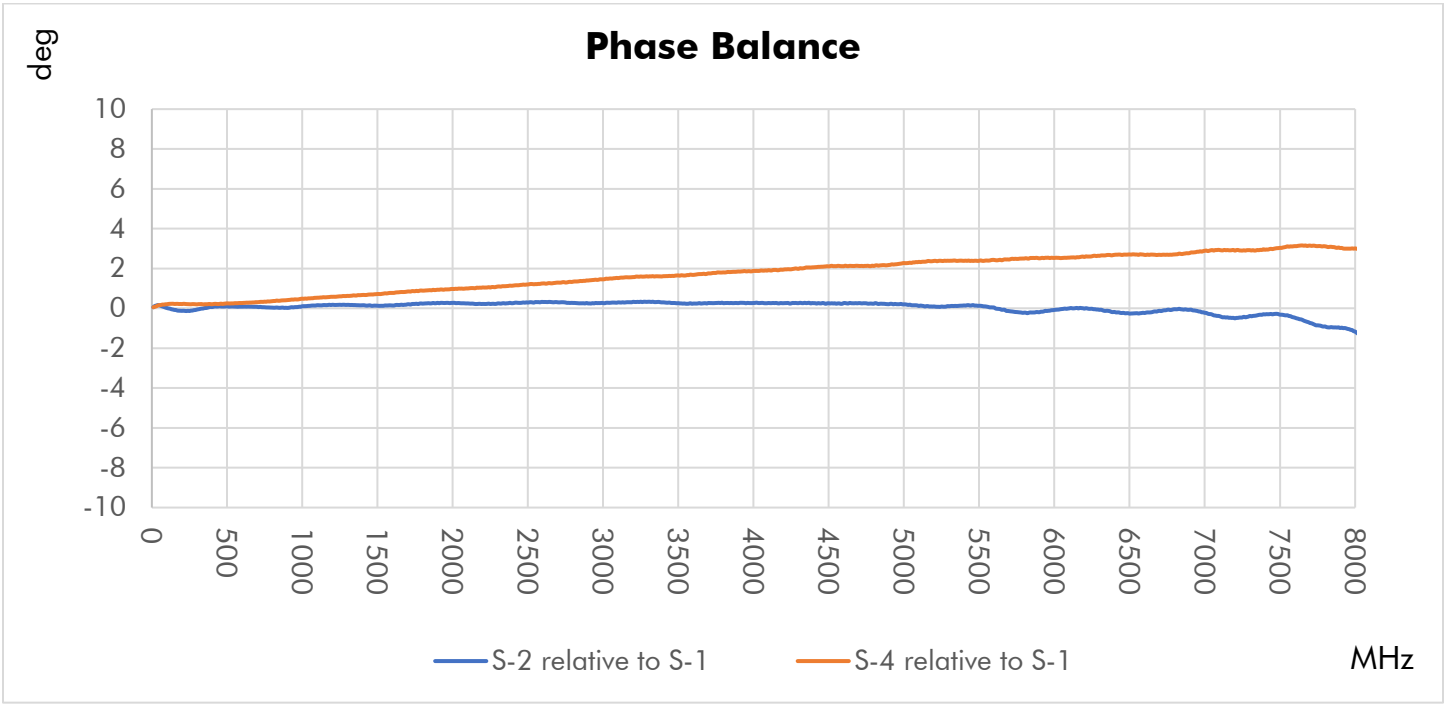
Parameter		Min.	Typ.	Max.	Unit
Frequency Range		600		7125	MHz
Impedance			50		Ω
Insertion Loss (includes 6dB loss to splitting)			1.7	2.4	dB
Return Loss (Port S)	600-700MHz 700-7125MHz	11 14	17 19		dB
Return Loss (Port 1-4)		18	21		dB
Isolation		18	21		dB
Amplitude Unbalance (±)[1]			0.2	0.6	dB
Phase Unbalance (±)[1]			2.5	9.0	Degrees
Input Power (CW)[2]				30	W

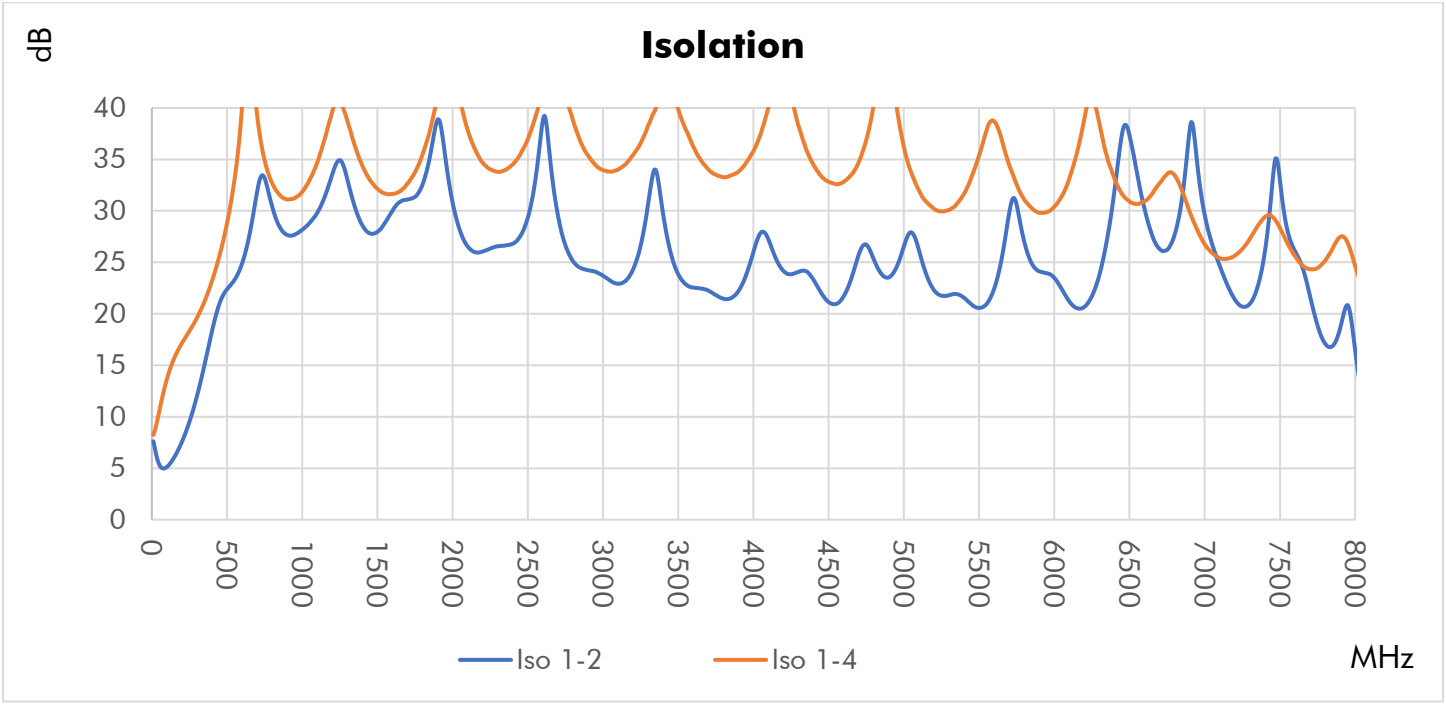
Connector Interface	SMA Female	RoHS Status[4]	RoHS3 Compliant
Operating Temperature[3]	-0 to +50 °C	REACH Status[4]	REACH Unaffected
Storage Temperature	-20 to +60 °C	Enclosure Material	Aluminum/Steel
Nominal Weight	1.9 kg (4.2 lb.)	Connectors Material	Brass, Gold Plated
Operating Humidity	10-90% (non-condensing)	Contacts Material	Beryllium Copper, Gold Plated
Operating Environment	Indoor Use Only	Insulators Material	Virgin PTFE
HTSUS Code	8548.00.0000	Finish	Black Paint
ECCN	EAR99	Country of Origin	USA

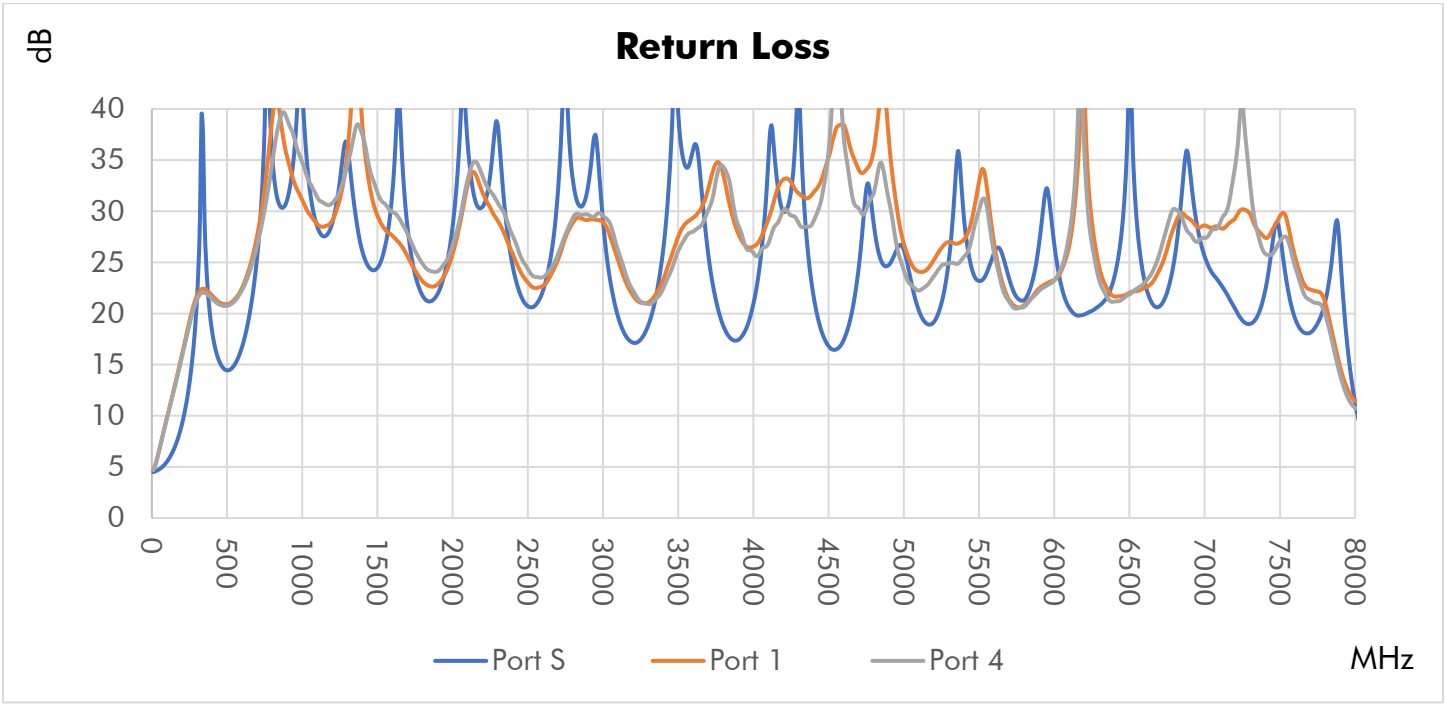
1. With reference to average.
2. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
3. Electrical specifications are tested at +25 °C.
4. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C (Individual Units)

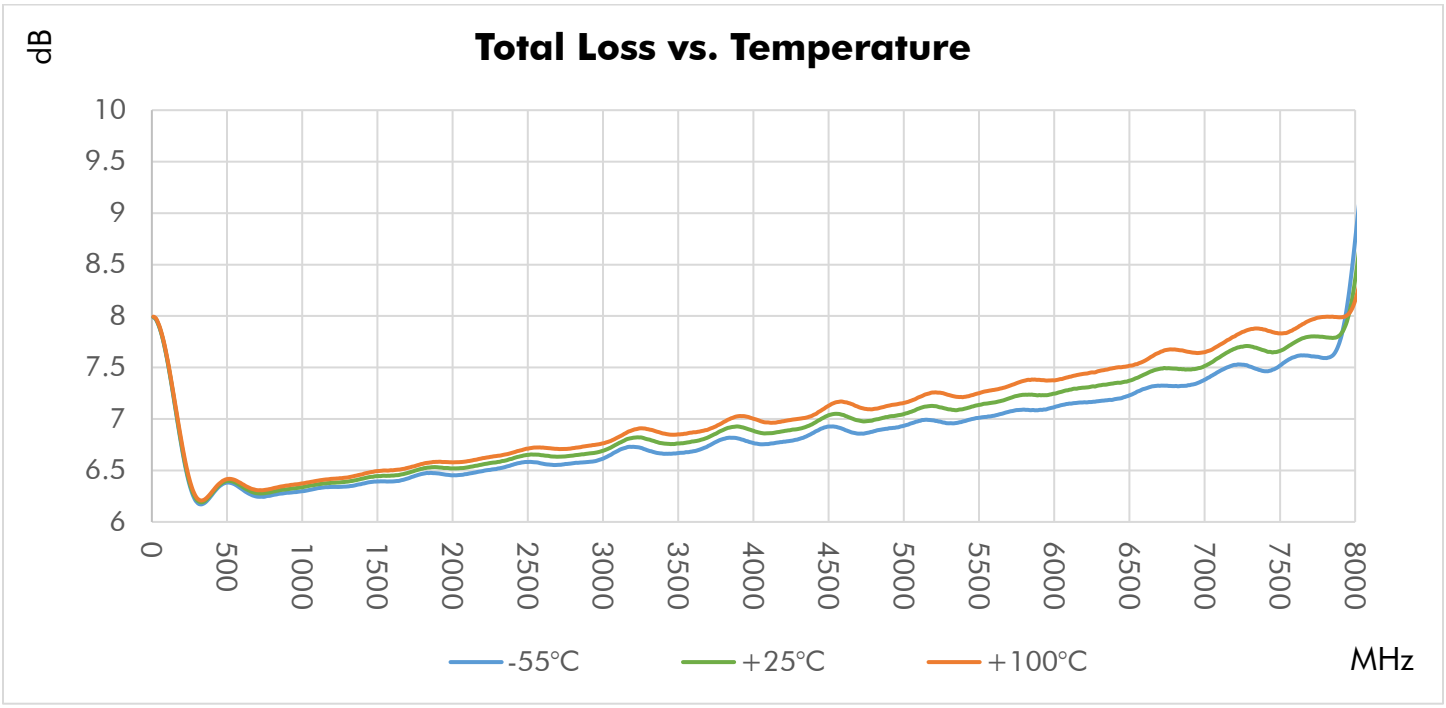


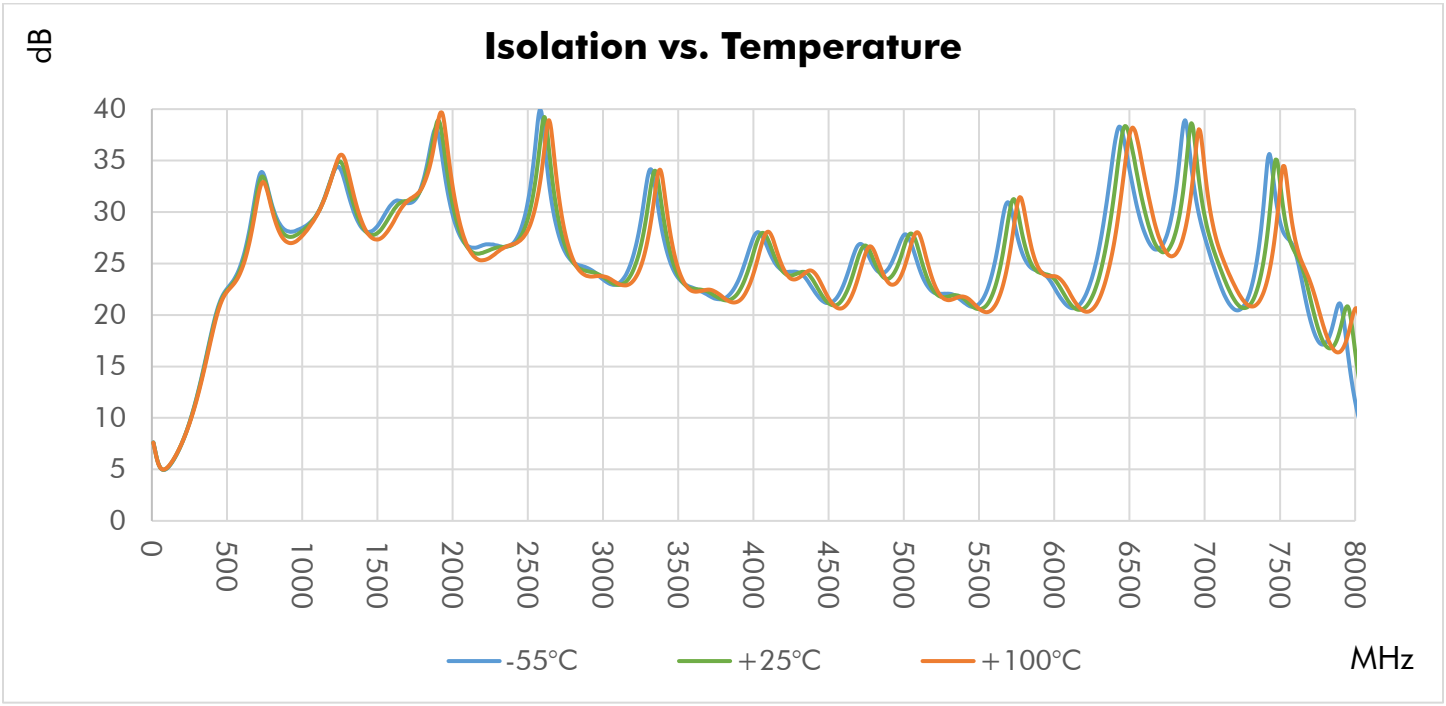


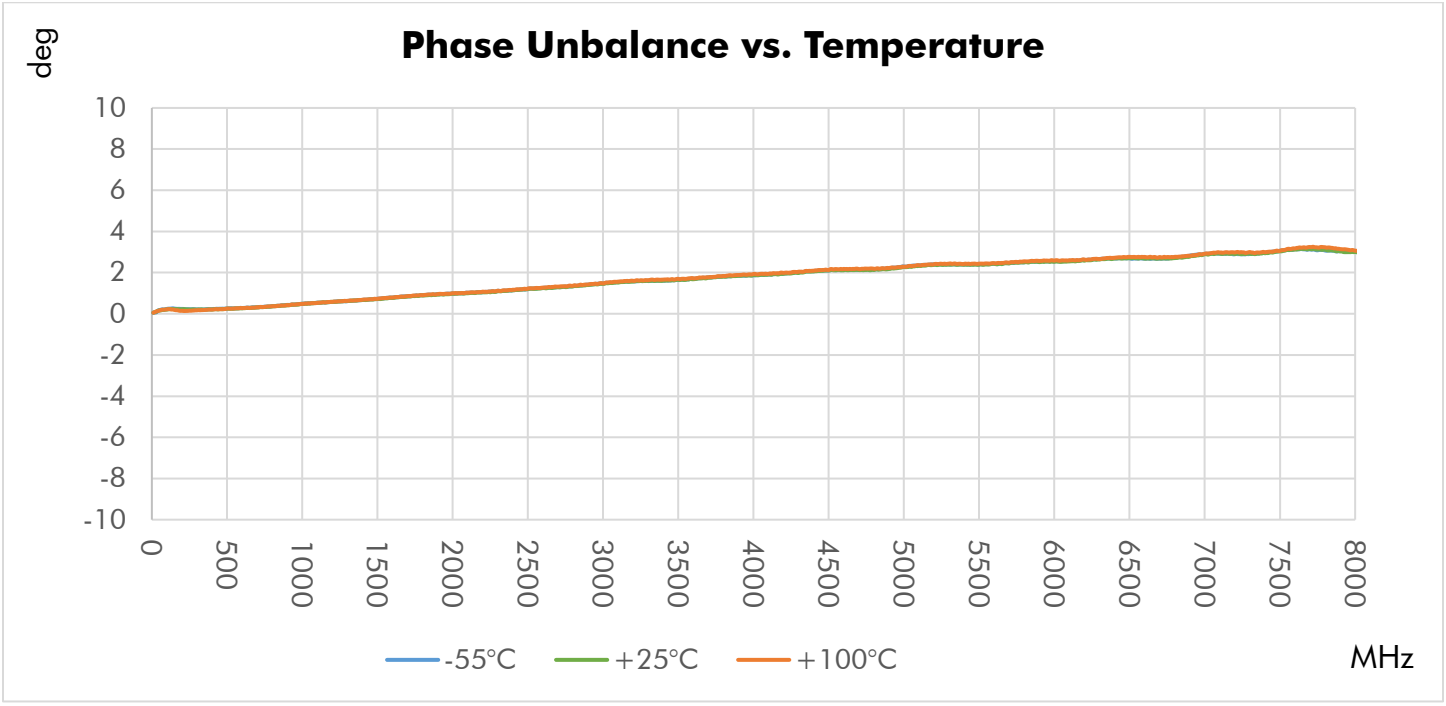

Isolation
dB
40
35
30
25
20
15
10
5
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
7000
7500
8000
Iso 1-2
Iso 1-4
MHz

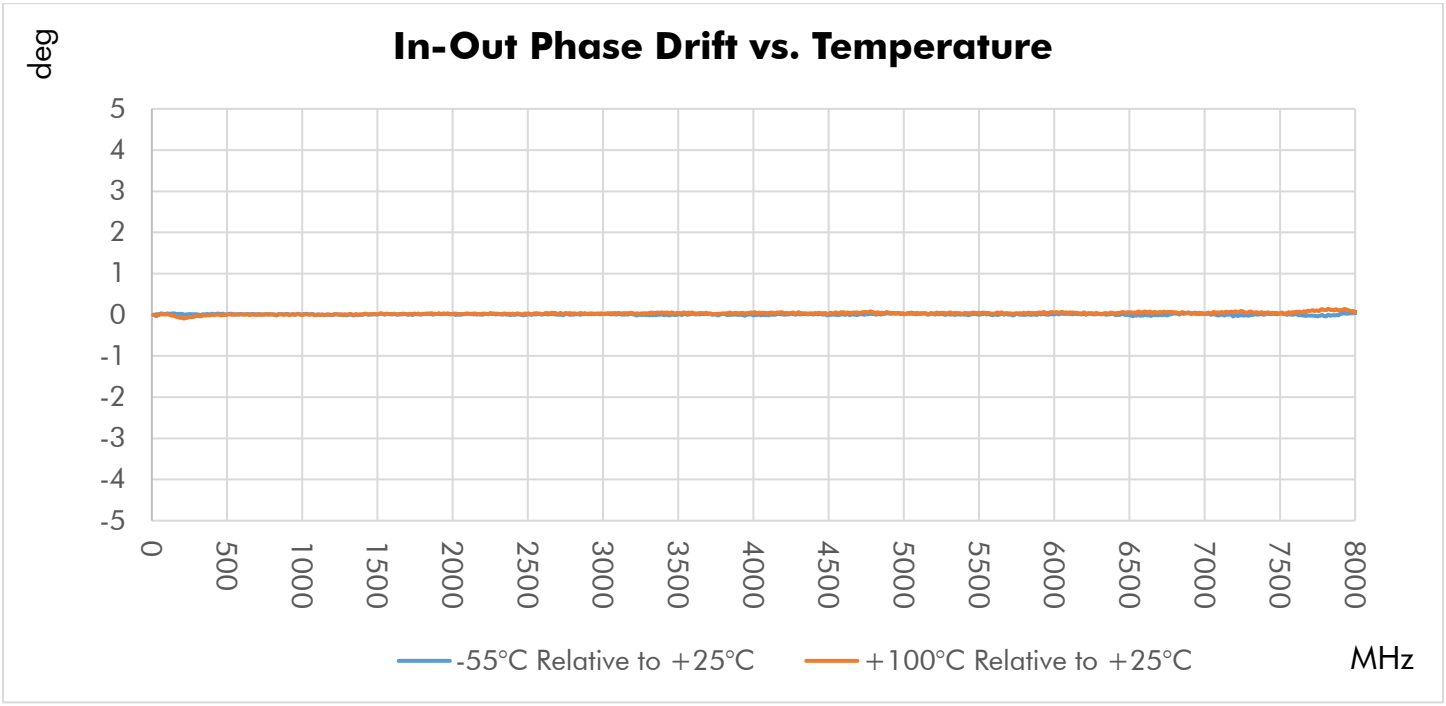

Return Loss
dB
40
35
30
25
20
15
10
5
0
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
7000
7500
8000
Port S
Port 1
Port 4
MHz

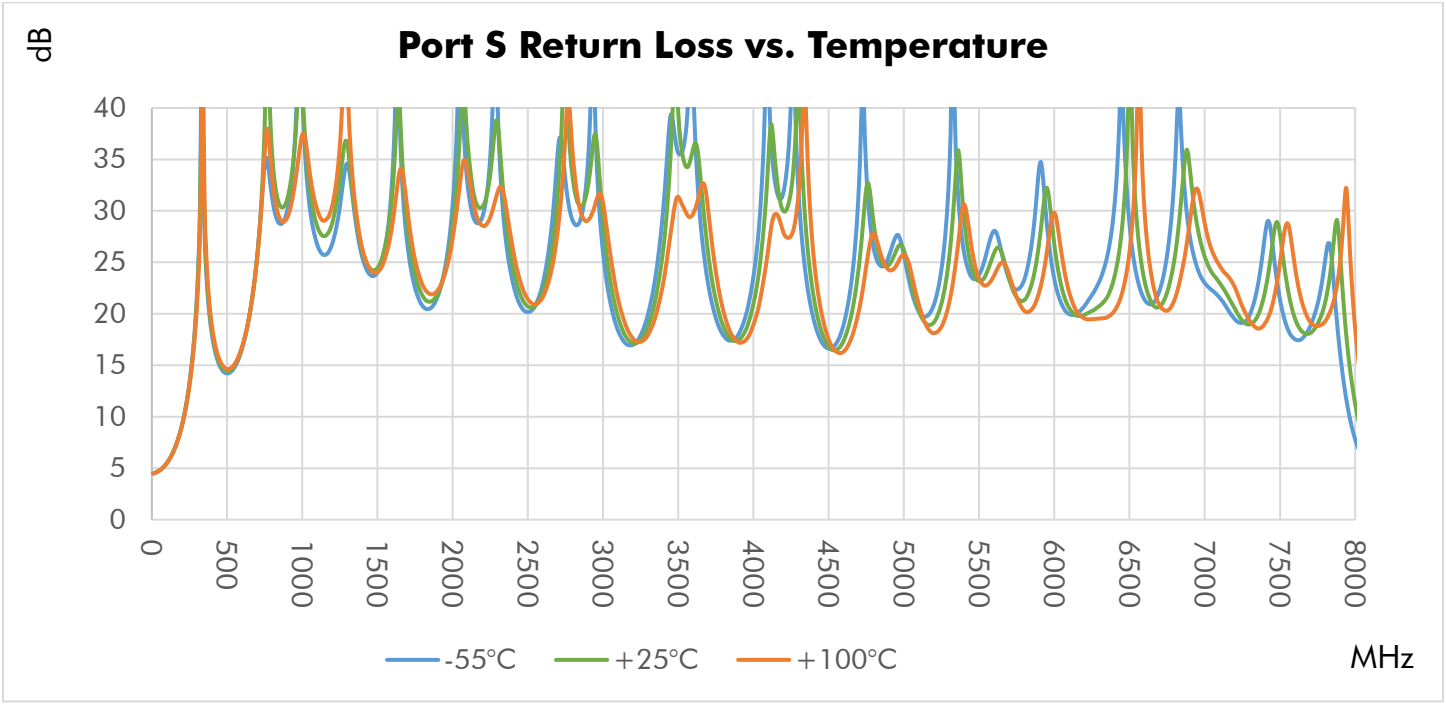
Typical Performance Over Temperature



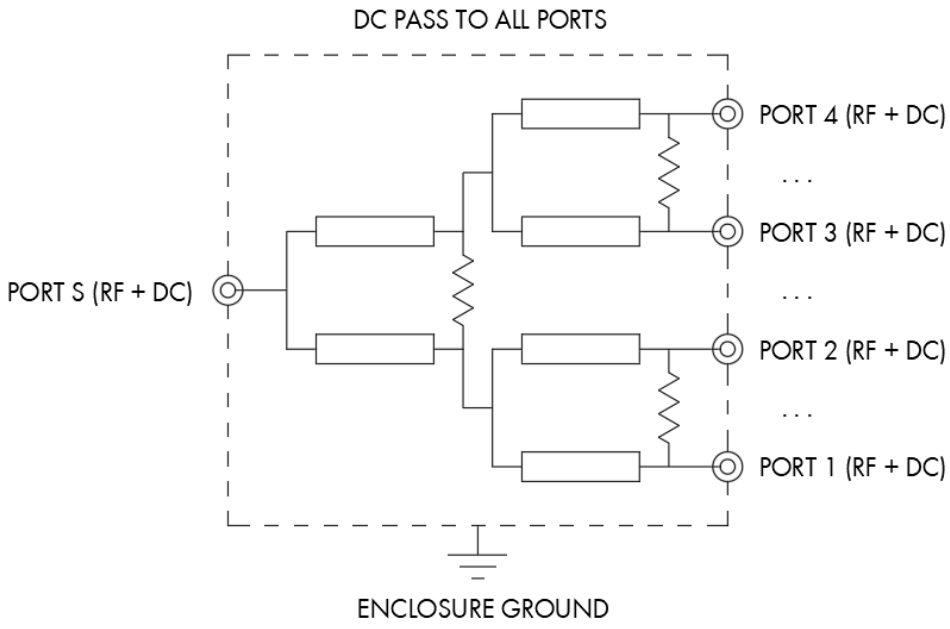



Phase Unbalance vs. Temperature
deg
10
8
6
4
2
0
-2
-4
-6
-8
-10
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
7000
7500
8000
-55°C
+25°C
+100°C
MHz


In-Out Phase Drift vs. Temperature
deg
5
4
3
2
1
0
-1
-2
-3
-4
-5
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
7000
7500
8000
-55°C Relative to +25°C
+100°C Relative to +25°C
MHz



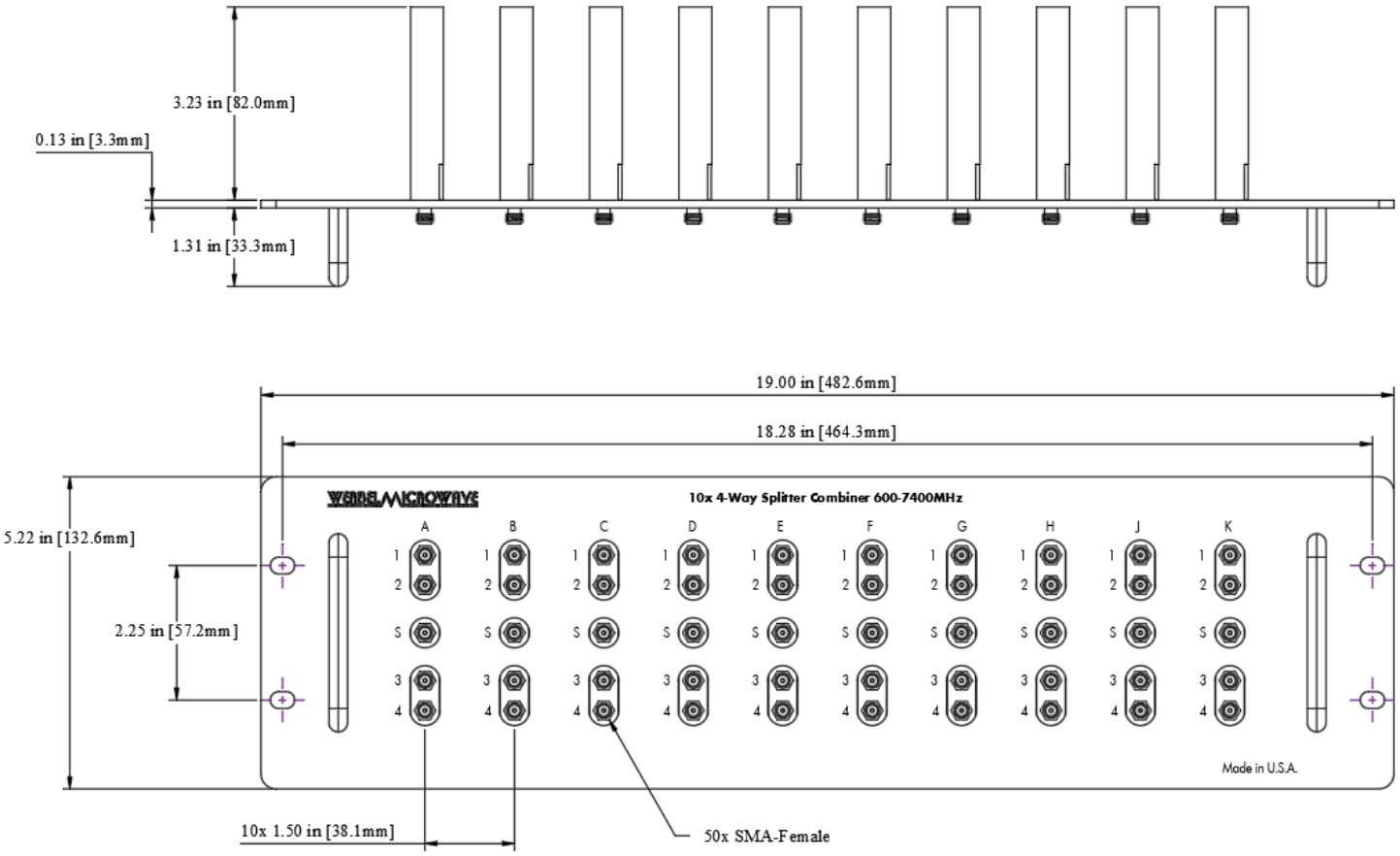
Simplified Electrical Schematic



Typical Performance Data

Frequency (MHz)	Total Loss (dB)		Amplitude Unbalance	Isolation (dB)	Phase Unbalance	Return Loss (dB)		
	S-1	S-4	(dB)		(deg.)	Port S	Port 1	Port 4
500	6.4	6.4	0.02	22.1	0.0	14.9	21.0	14.9
700	6.3	6.4	0.01	34.5	0.3	27.8	27.7	27.9
900	6.4	6.4	0.01	27.5	0.2	28.3	35.1	28.3
1100	6.4	6.4	0.02	28.3	0.1	26.1	28.8	26.1
1300	6.4	6.5	0.02	32.0	0.2	32.6	34.1	32.6
1500	6.5	6.5	0.02	26.9	0.1	24.3	30.9	24.2
1700	6.5	6.5	0.01	28.3	0.1	24.9	25.4	24.8
1900	6.6	6.6	0.00	38.7	0.2	22.7	23.3	22.8
2100	6.6	6.6	0.01	26.0	0.2	31.4	32.7	31.4
2300	6.6	6.7	0.02	24.3	0.2	28.8	30.2	28.8
2500	6.7	6.7	0.02	29.1	0.2	20.5	23.1	20.5
2700	6.7	6.7	0.02	30.7	0.2	32.3	25.3	32.4
2900	6.7	6.7	0.01	22.5	0.2	32.7	34.0	32.8
3100	6.8	6.8	0.01	22.1	0.4	19.4	25.3	19.4
3300	6.9	6.9	0.03	27.9	0.3	19.6	20.9	19.6
3500	6.8	6.9	0.02	24.0	0.3	29.0	25.2	29.0
3700	6.9	6.9	0.01	21.7	0.3	25.5	32.6	25.4
3900	7.0	7.0	0.02	21.5	0.4	20.2	30.5	20.2
4100	7.0	7.0	0.03	27.8	0.3	23.5	25.8	23.6
4300	7.0	7.0	0.03	23.7	0.3	30.8	29.9	30.7
4500	7.1	7.1	0.03	21.6	0.3	20.6	32.8	20.6
4700	7.1	7.1	0.03	23.3	0.5	19.8	33.7	19.8
4900	7.1	7.1	0.05	23.9	0.4	32.0	32.0	32.2
5100	7.1	7.2	0.05	27.8	0.5	24.0	22.0	23.9
5300	7.2	7.3	0.06	20.5	0.5	18.7	26.0	18.7
5500	7.2	7.3	0.06	20.5	0.6	30.5	29.7	30.5
5700	7.3	7.3	0.06	24.3	0.7	25.4	22.4	25.6
5900	7.4	7.4	0.06	24.5	0.8	19.6	19.8	19.7
6100	7.3	7.4	0.07	21.3	0.6	29.6	26.2	29.9
6300	7.4	7.5	0.08	21.5	0.4	18.9	27.2	18.9
6500	7.5	7.6	0.06	30.2	0.5	19.0	19.8	18.9
6700	7.5	7.6	0.06	27.5	0.3	30.5	24.6	30.7
6900	7.6	7.7	0.07	28.5	0.2	21.1	30.4	21.1
7100	7.6	7.7	0.05	21.9	0.3	22.6	23.5	22.7
7300	7.7	7.8	0.06	21.8	0.6	30.0	29.7	30.0
7500	7.9	7.9	0.05	27.4	0.7	15.8	29.1	15.8
7700	7.9	7.9	0.07	20.6	0.9	19.6	25.3	19.6
7900	7.9	8.0	0.06	18.6	0.7	19.8	15.2	19.8

Outline Dimensions



Outline drawing: OL-U-4-10CT-4974
Dimensions are in inches, [mm] shown for convenience.
Tolerances on 2-pl decimals: ±.03. 3-pl decimals: ± .015.