

Resistive Divider, DC-7.2GHz, 12-way, SMA-Female

WMRD12-7.2-S

Description

WMRD12-7.2-S is a resistive splitter that covers up to 7.2GHz with ultra-wide bandwidth. This unique design accomplishes extremely flat frequency response in a small radial package. Our unique design approach provides higher than expected isolation between outputs at far ports than would be achieved in a typical star topology. It has applications in markets such as CATV, test and measurement, and military radio. Its small size makes it easy to integrate into compact systems. Designed, assembled, and tested in the USA.



Photo is representative.

Specifications	Min.	Typ.	Max.	Units
Frequency	DC	--	7.2	GHz
Impedance	--	50	--	Ohm
Return Loss (Port S)	9.5	12	--	dB
Return Loss (Port 1-12)	9.5	14	--	dB
Insertion Loss (Total Measured Loss)	--	21.6	23.1	dB
Isolation (Within Group)	--	11.9	--	dB
(Between Groups A-B-C)	--	33.5	--	dB
Input Power (CW) ¹	--	--	1	Watts

Mechanical

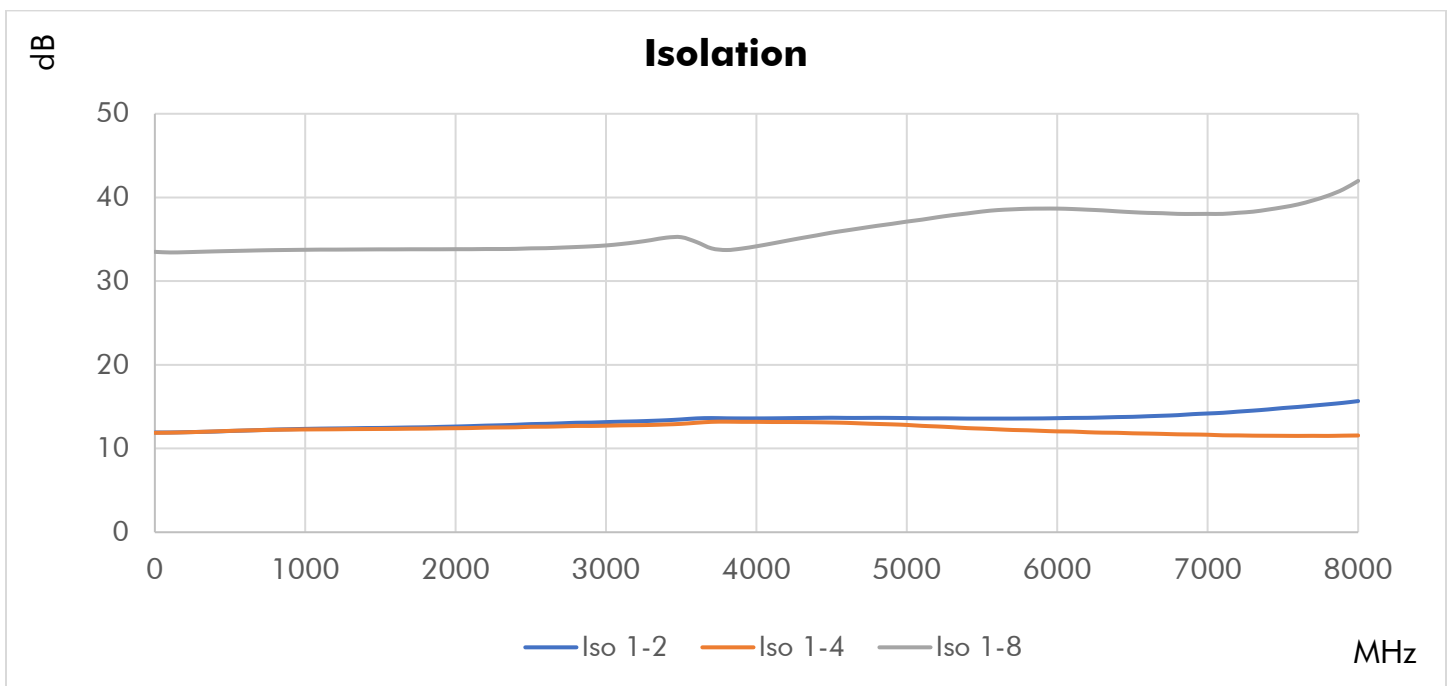
Connector Interface	SMA-Female
Operating Temperature ²	-40 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	94.6 g (3.34 oz)
Humidity	10-90% non-condensing
Environment	Indoors Use Only
CAGE Code	78YZ0

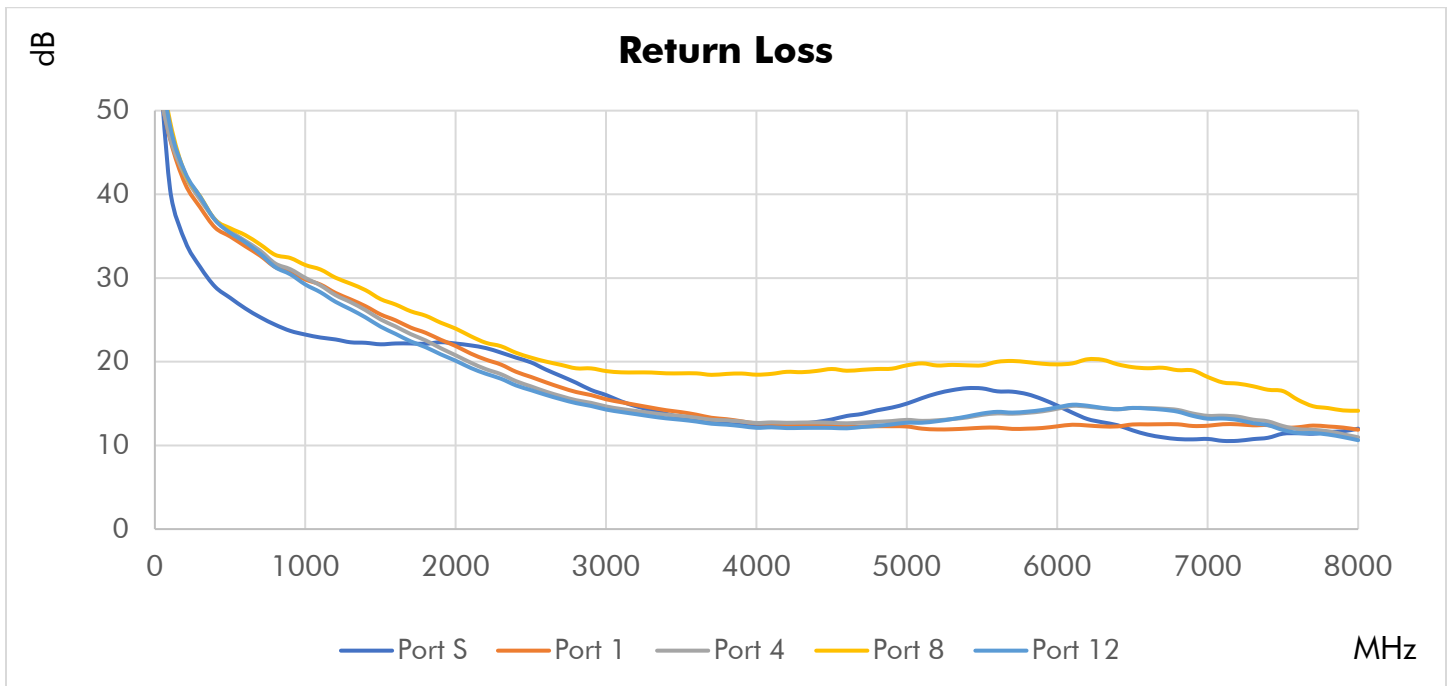
Materials

RoHS Compliant ³	Yes
REACH Compliant ³	Yes
Enclosure	Aluminum
Connectors	Brass, Gold Plated
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Green Paint

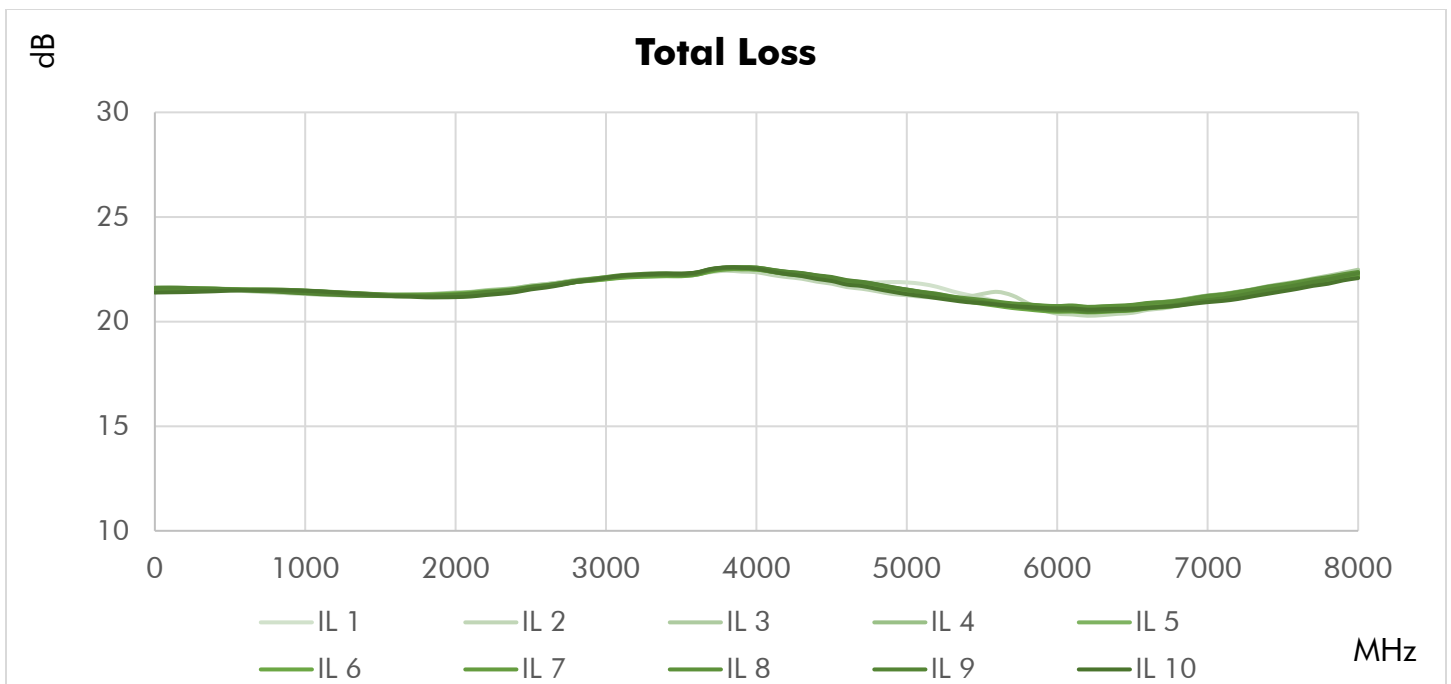
1. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
2. Electrical specifications at +25 °C only.
3. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C





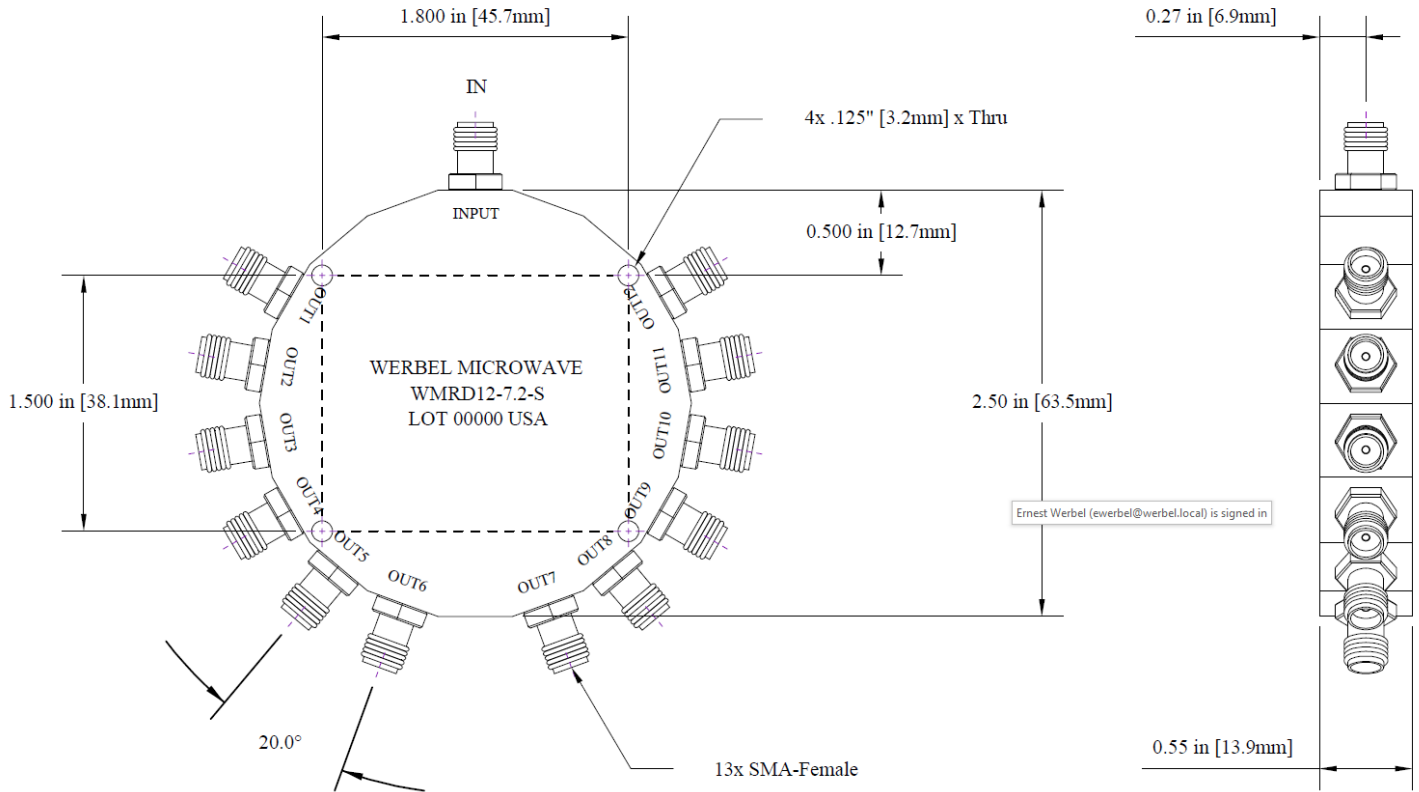
Repeatability in Production



Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)			Isolation (dB)		
	Port S	Port 1	Port 12	S-1	S-6	S-12	1-2	1-4	1-8
1	63.24	55.07	60.07	21.62	21.60	21.60	11.92	11.88	33.50
100	40.63	46.62	48.18	21.61	21.60	21.60	11.92	11.90	33.43
200	34.42	41.27	42.62	21.60	21.59	21.59	11.95	11.94	33.46
300	31.32	38.45	39.72	21.60	21.58	21.58	11.99	11.99	33.51
400	28.95	36.02	36.91	21.58	21.57	21.57	12.03	12.05	33.56
500	27.63	34.96	35.40	21.56	21.56	21.55	12.10	12.11	33.60
600	26.37	33.80	34.28	21.52	21.54	21.52	12.15	12.16	33.64
700	25.31	32.66	32.89	21.49	21.52	21.49	12.21	12.20	33.68
800	24.41	31.30	31.29	21.45	21.50	21.46	12.27	12.24	33.71
900	23.68	30.72	30.44	21.41	21.48	21.42	12.31	12.26	33.73
1000	23.24	29.82	29.22	21.37	21.46	21.39	12.35	12.28	33.75
1500	22.08	25.65	24.19	21.26	21.39	21.27	12.46	12.34	33.80
2000	22.17	21.87	20.11	21.34	21.43	21.33	12.63	12.43	33.82
2500	19.92	18.18	16.60	21.67	21.61	21.64	12.92	12.60	33.92
3000	16.01	15.51	14.28	22.06	21.84	22.02	13.16	12.73	34.27
3500	13.33	13.97	13.06	22.17	21.95	22.17	13.48	12.95	35.25
4000	12.56	12.62	12.10	22.44	22.48	22.49	13.60	13.19	34.17
4500	13.10	12.32	12.09	22.00	22.36	22.04	13.68	13.11	35.80
5000	15.00	12.26	12.71	21.87	21.93	21.45	13.64	12.82	37.12
5500	16.81	12.11	13.81	21.14	21.35	20.85	13.58	12.38	38.32
6000	14.75	12.28	14.55	20.60	20.80	20.47	13.63	12.05	38.67
6500	11.80	12.50	14.48	20.63	20.57	20.53	13.79	11.82	38.24
7000	10.77	12.35	13.19	21.11	20.70	21.01	14.19	11.65	38.04
7500	11.40	12.11	11.84	21.71	21.00	21.60	14.84	11.52	38.83
8000	12.00	11.87	10.62	22.28	21.55	22.24	15.67	11.56	41.98

Outline Dimensions



Outline drawing: OL-R18-12

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

Tolerances on 2-pl decimals: ±.03. 3-pl decimals: ± .015.

Group	A				B				C			
Port	1	2	3	4	5	6	7	8	9	10	11	12

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