

Resistive Divider, DC-7.2GHz, 2-way, SMA-Female

WMRD02-7.2-S

Description

WMRD02-7.2-S is a resistive splitter that covers up to 7.2GHz with ultra-wide bandwidth. This design is useful when there are many low power signals within a wide spectrum. By design, the nominal insertion loss and isolation is 6dB, hence it is often referred to as a “6dB splitter”. 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 1-2)	9.5	14	--	dB
Insertion Loss (Total Measured Loss)	--	6.0	7.0	dB
Isolation	--	6.0	--	dB
Input Power (CW) ¹	--	--	1	Watts

Mechanical

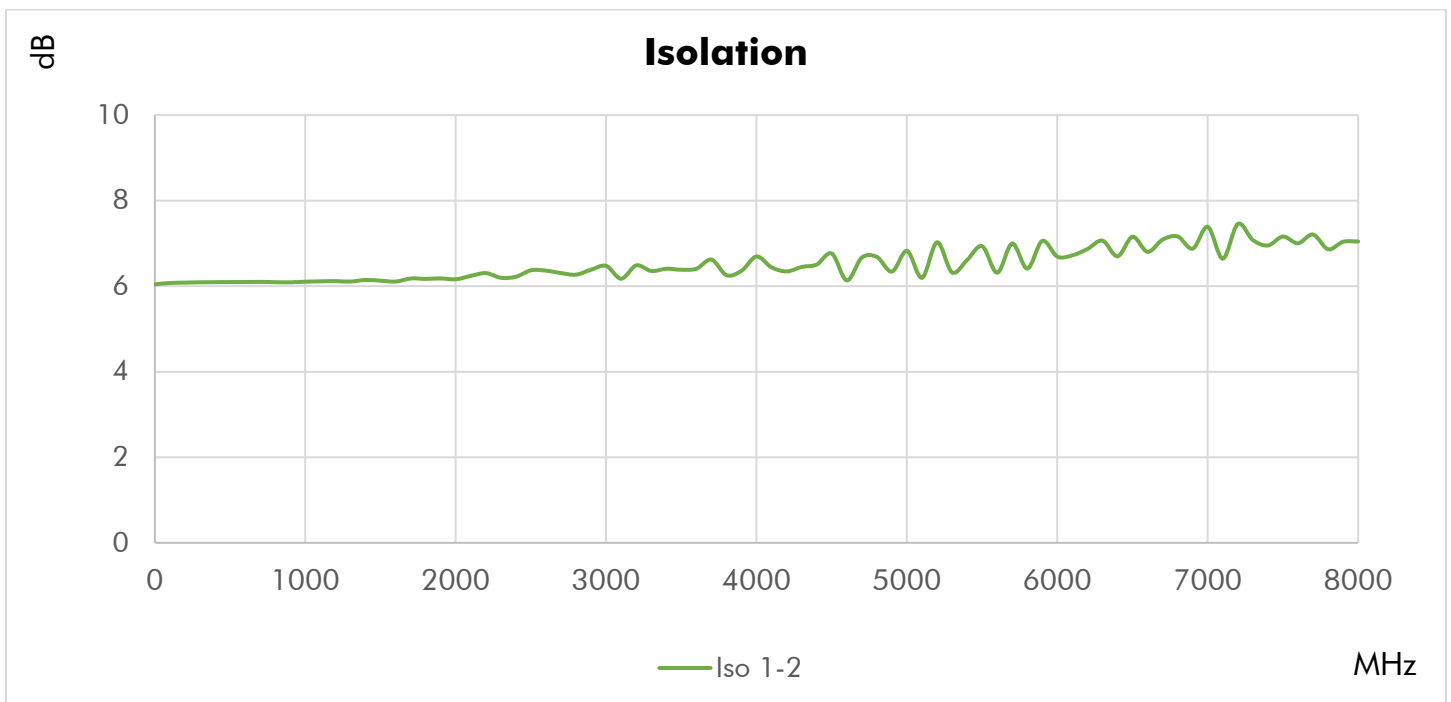
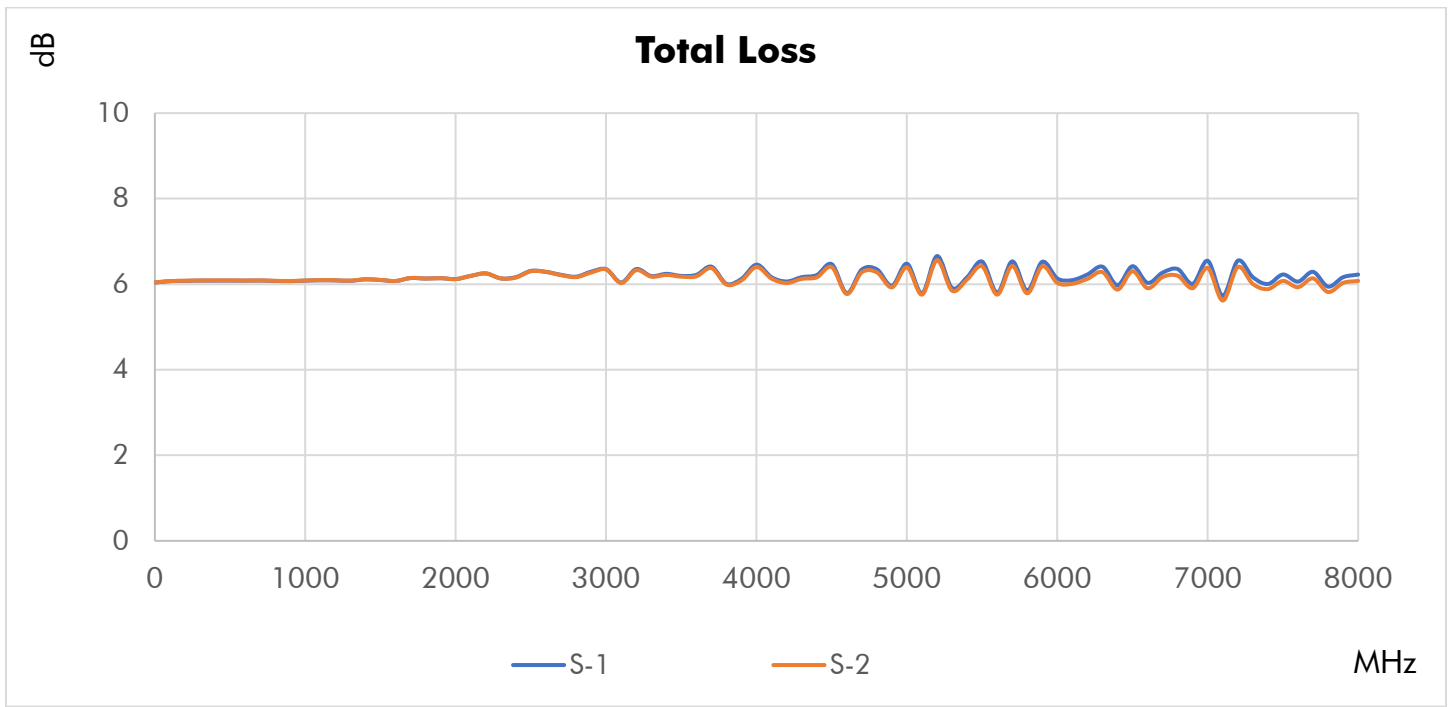
Connector Interface	SMA-Female
Operating Temperature ²	-40 to +85 °C
Storage Temperature	-55 to +100 °C
Weight Estimate	20.6 g (0.73 oz)
Humidity	10-90% non-condensing
Environment	Indoors Use Only
CAGE Code	78YZ0

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

Materials

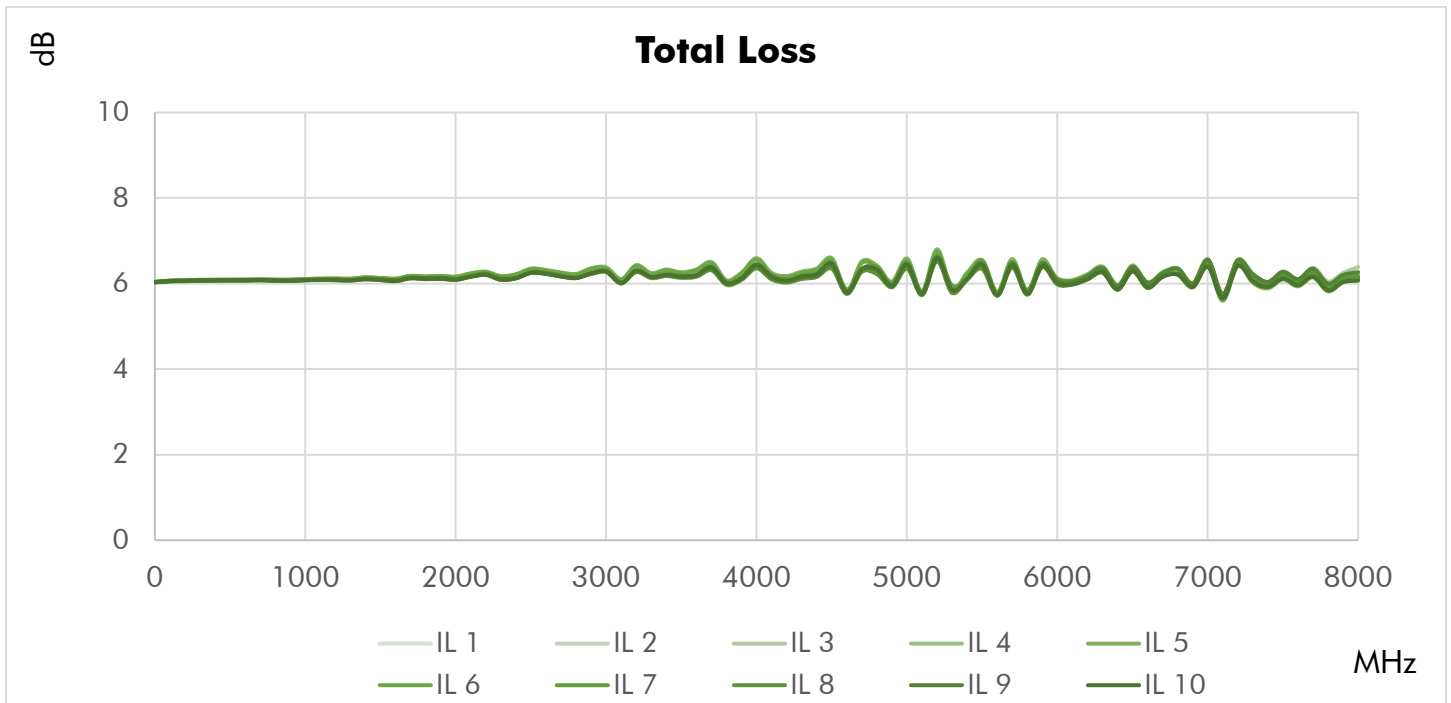
RoHS Compliant ³	Yes
REACH Compliant ³	Yes
Enclosure	Aluminum
Connectors	Brass, Gold Plated
Contacts	Be Cu, Gold Plated
Insulators	PTFE
Finish	Green Paint

Typical Performance at +25 °C





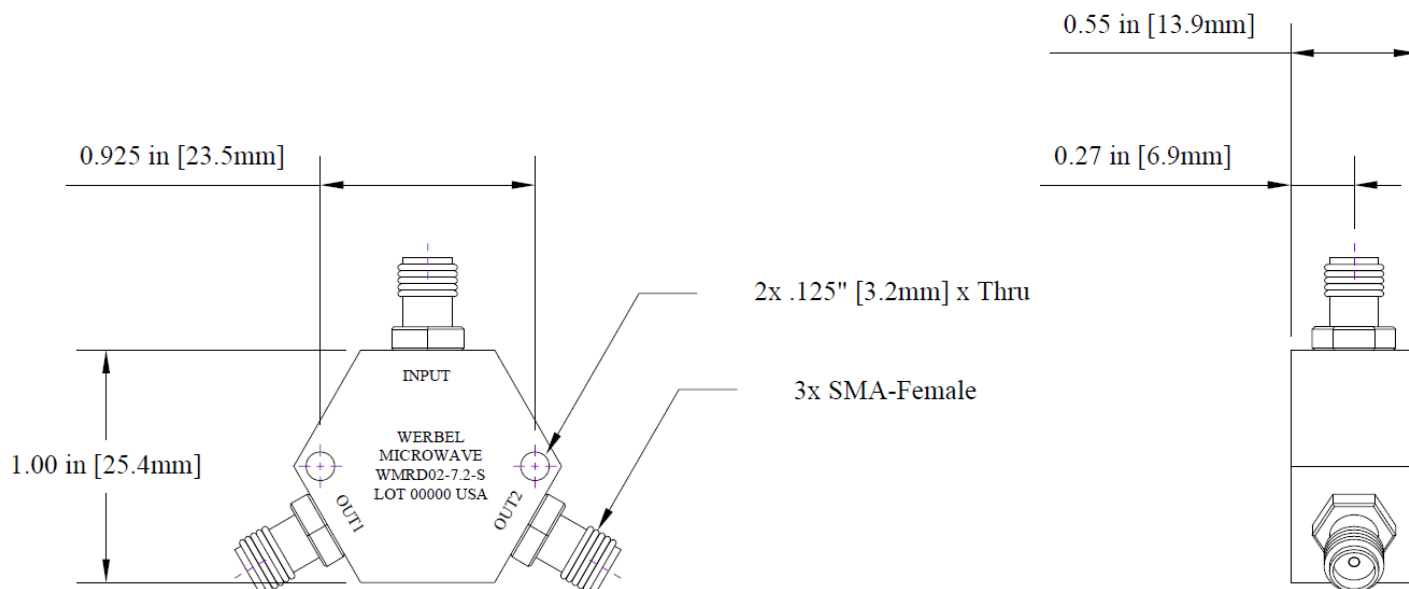
Repeatability in Production



Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)
	Port S	Port 1	Port 2	S-1	S-2	1-2
1	53.20	51.75	52.25	6.04	6.04	6.04
100	41.65	43.31	43.37	6.07	6.07	6.07
200	37.22	39.60	39.51	6.08	6.08	6.08
300	34.48	37.09	36.95	6.08	6.09	6.09
400	32.50	35.43	35.31	6.08	6.09	6.09
500	30.91	33.92	33.79	6.08	6.09	6.10
600	29.51	32.76	32.58	6.08	6.09	6.10
700	28.42	31.89	31.71	6.09	6.09	6.10
800	27.41	30.90	30.70	6.08	6.08	6.09
900	26.55	30.21	29.99	6.07	6.08	6.09
1000	25.74	29.54	29.30	6.08	6.09	6.10
1500	22.63	26.84	26.52	6.10	6.10	6.13
2000	20.21	24.61	24.30	6.12	6.12	6.16
2500	18.15	22.39	22.25	6.31	6.30	6.37
3000	16.50	20.47	20.57	6.35	6.34	6.47
3500	15.10	18.88	19.23	6.19	6.18	6.38
4000	14.08	17.41	17.95	6.46	6.40	6.69
4500	13.36	16.22	16.90	6.47	6.40	6.76
5000	12.82	15.47	16.16	6.48	6.40	6.82
5500	12.42	14.74	15.38	6.53	6.42	6.93
6000	12.14	14.19	14.76	6.13	6.03	6.69
6500	12.07	13.85	14.37	6.42	6.30	7.15
7000	12.10	13.48	14.00	6.55	6.38	7.39
7500	12.49	13.50	14.09	6.23	6.08	7.16
8000	12.59	13.62	14.36	6.23	6.08	7.04

Outline Dimensions



Outline drawing: OL-R06-02

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

Tolerances on 2-pl decimals: $\pm .03$. 3-pl decimals: $\pm .015$.

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