

Resistive Divider, DC-7.2GHz, 4-way, SMA-Female

WMRD04-7.2-S

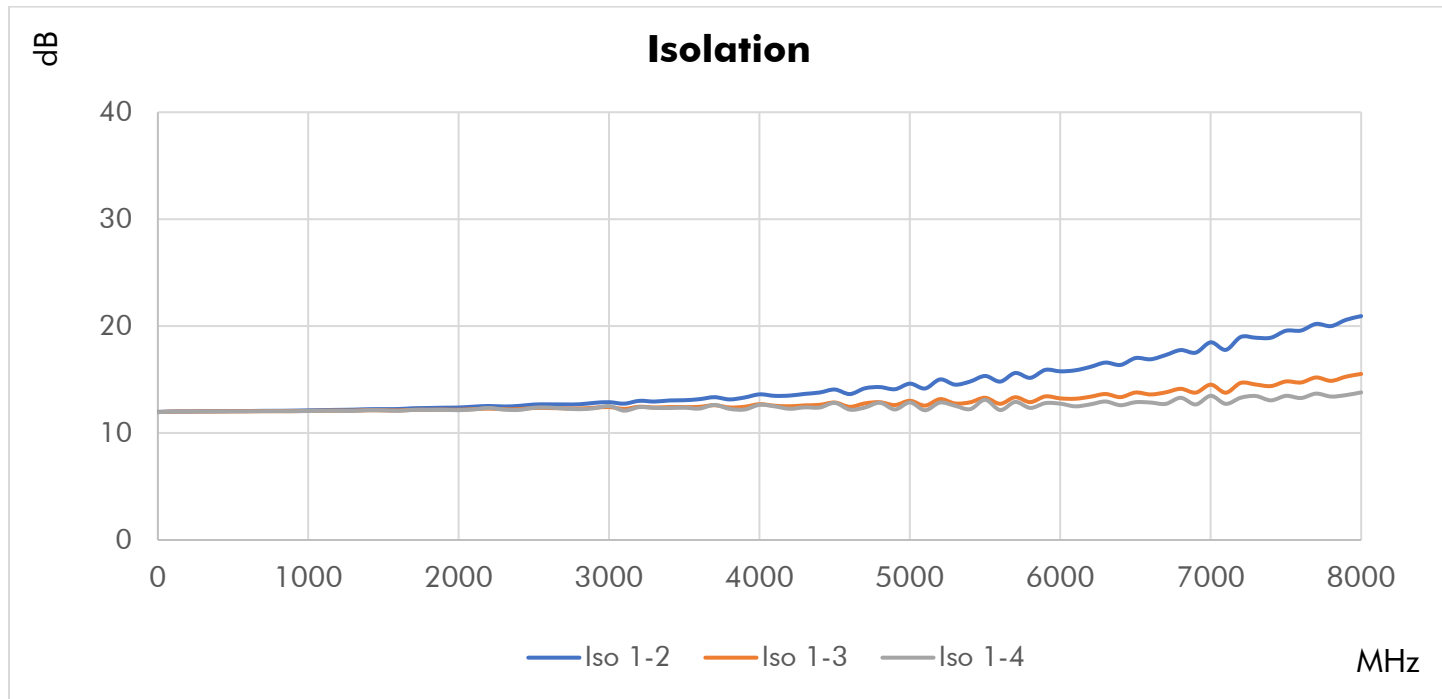


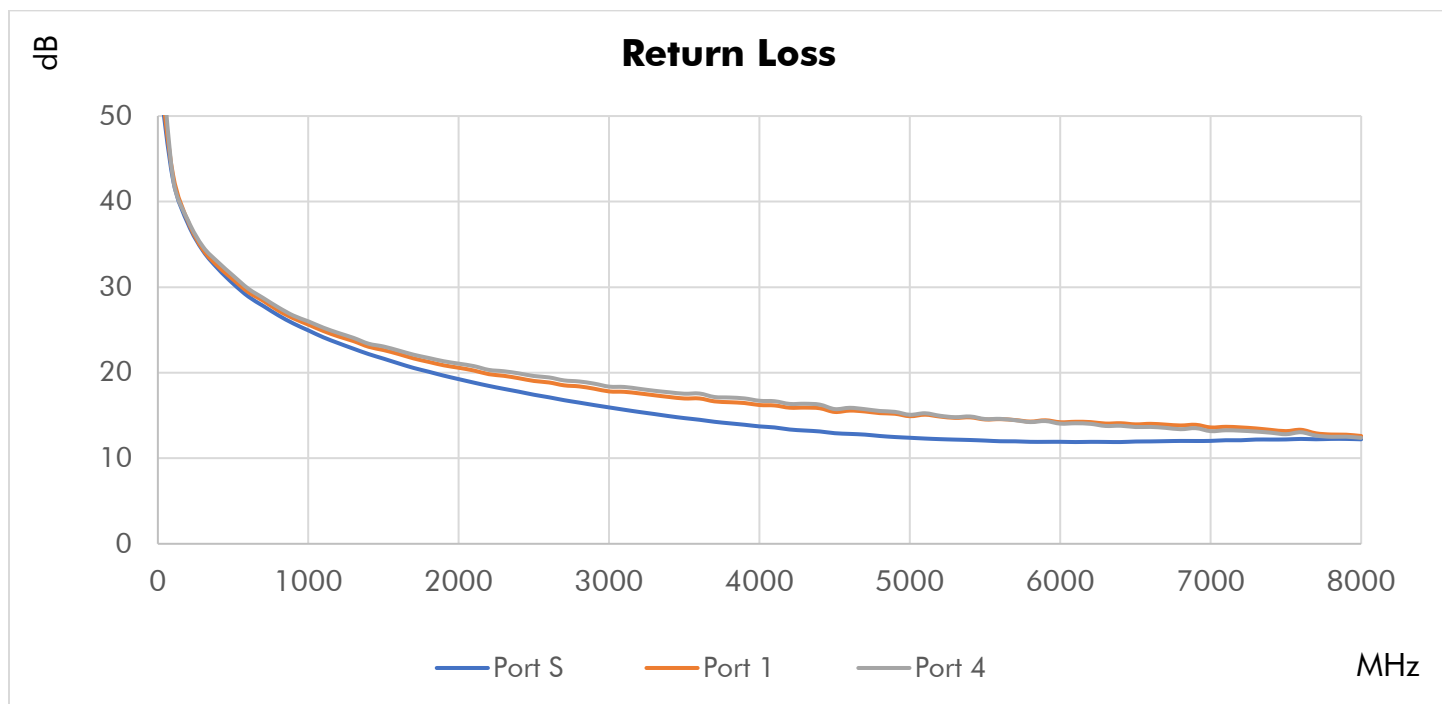
Specifications	Min.	Typ.	Max.	Units
Frequency	DC		7.2	GHz
Impedance		50		Ohm
Return Loss (Port S)	9.5	12		dB
Return Loss (Port 1-2)	9.5	14		dB
Insertion Loss (Total Measured Loss)		12.0	13.2	dB
Isolation		12.0		dB
Input Power (CW) ¹ up to +30°C; derate linearly to +25dBm at +85°C.			+30	dBm

Connector Interface	SMA-Female	RoHS Status ³	RoHS3 Compliant
Operating Temperature ²	-40 to +85 °C	REACH Status ³	REACH Unaffected
Storage Temperature	-55 to +100 °C	Enclosure Material	Aluminum
Nominal Weight	25.2 g (0.89 oz)	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
CAGE Code	78YZ0	Finish	Green Paint

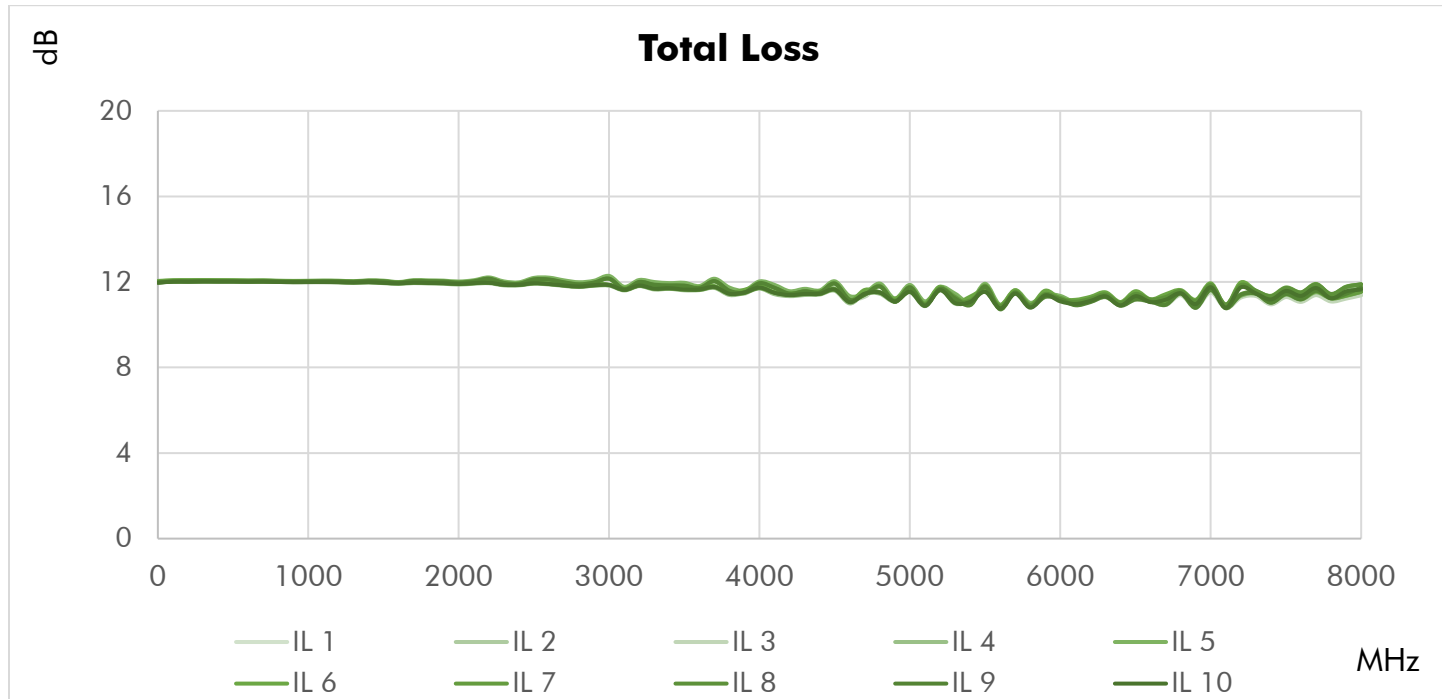
1. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
2. Electrical specifications are tested at +25 °C.
3. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C





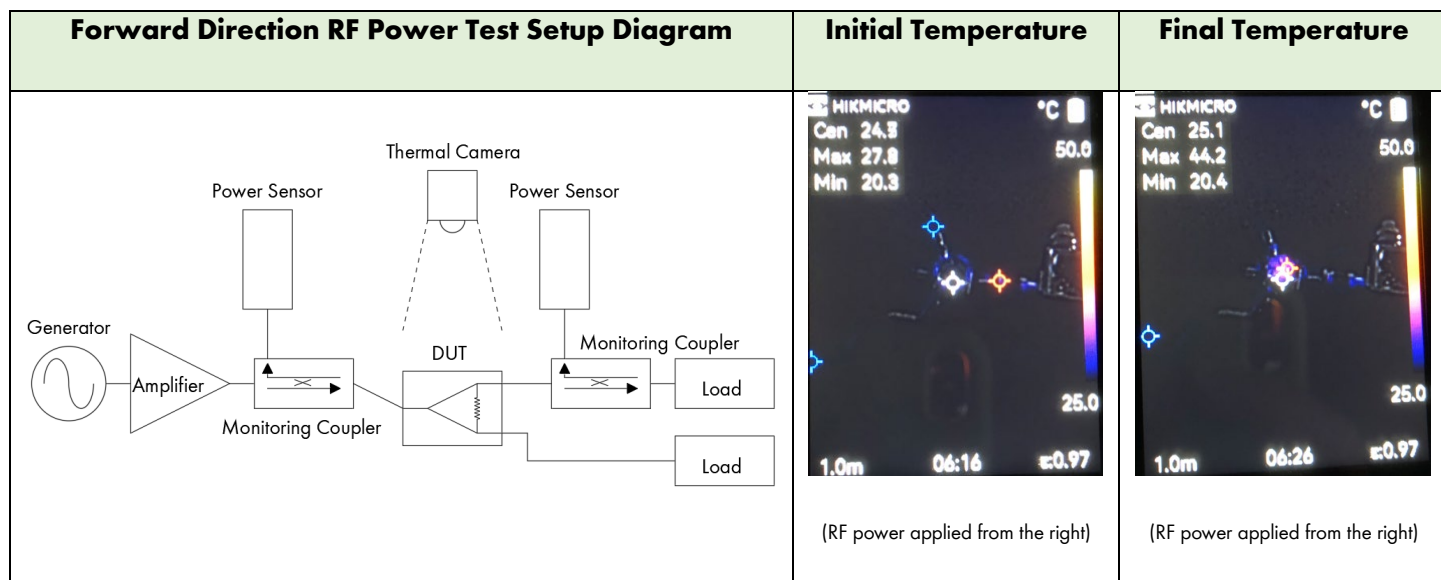
Repeatability in Production



Reliability Testing

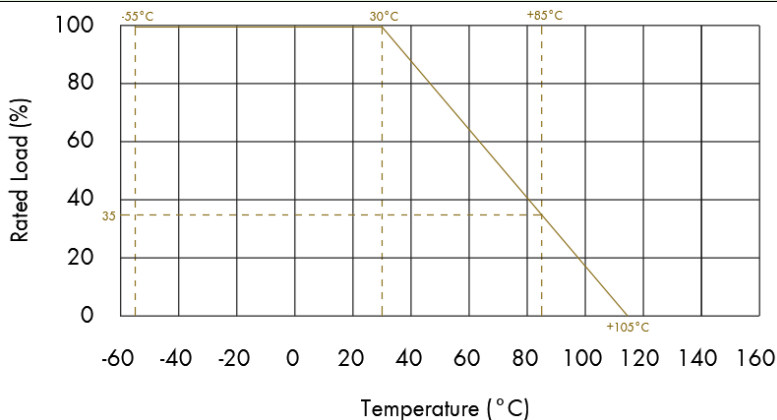
RF power test was performed to determine the input power required to produce a nominal temperature rise of 20°C at the hottest point. The test was performed at room temperature without forced air. A heatsink was not used unless it came standard with the product.

Model WMRD03-7.2-S is shown. Derivative models' details arrived at by similarity until they are individually tested and datasheets updated.



- 0.6 watts CW (shown above) at 500MHz was applied to the DUT input for a duration of 10 minutes.
- The DUT temperature increased from 24.3°C (initial, center marker) to 44.2°C (final, max marker), resulting in a 19.9°C rise.
- 1 watt CW at 500MHz produced a rise temperature of 35°C after 10 minutes.

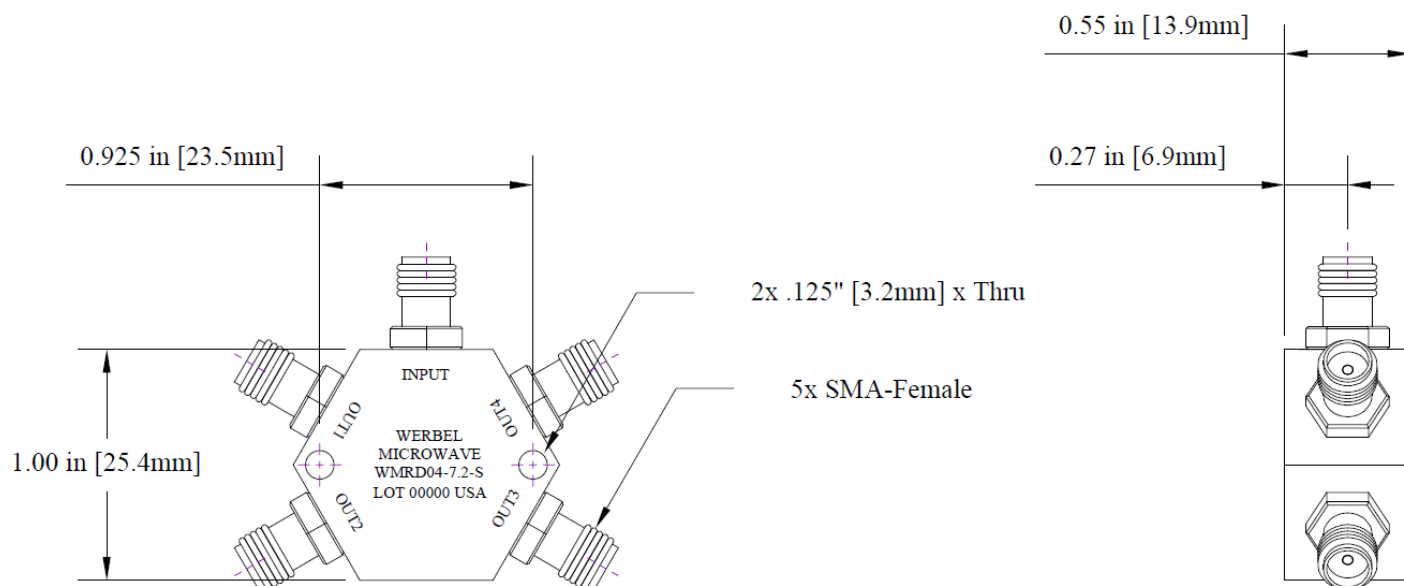
Derating Curve



Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)	
	Port S	Port 1	Port 4	S-1	S-4	1-2	1-4
1	55.51	56.81	62.09	11.98	11.97	11.98	11.96
100	42.55	43.11	42.66	12.01	12.02	12.02	12.00
200	37.38	37.66	37.79	12.02	12.03	12.02	12.00
300	34.22	34.36	34.70	12.03	12.04	12.04	12.02
400	32.13	32.42	32.91	12.03	12.04	12.04	12.02
500	30.40	30.88	31.34	12.03	12.04	12.05	12.03
600	28.91	29.42	29.83	12.02	12.03	12.06	12.03
700	27.80	28.40	28.73	12.03	12.04	12.08	12.05
800	26.71	27.26	27.64	12.02	12.03	12.08	12.04
900	25.75	26.36	26.68	12.01	12.02	12.10	12.04
1000	24.94	25.62	26.00	12.02	12.03	12.12	12.06
1500	21.64	22.64	23.06	12.02	12.03	12.24	12.12
2000	19.24	20.58	21.06	11.95	11.97	12.39	12.14
2500	17.42	19.03	19.61	12.08	12.09	12.67	12.37
3000	15.94	17.81	18.37	12.13	12.12	12.89	12.53
3500	14.69	16.99	17.54	11.81	11.82	13.07	12.37
4000	13.72	16.22	16.72	11.90	11.92	13.62	12.64
4500	12.93	15.41	15.75	11.93	11.95	14.07	12.82
5000	12.39	14.91	15.08	11.78	11.84	14.62	12.87
5500	12.07	14.53	14.58	11.87	11.94	15.34	13.11
6000	11.92	14.21	14.05	11.32	11.43	15.77	12.75
6500	11.95	13.96	13.65	11.26	11.41	17.02	12.89
7000	12.03	13.60	13.17	11.67	11.87	18.49	13.48
7500	12.20	13.17	12.81	11.46	11.66	19.57	13.48
8000	12.21	12.60	12.38	11.55	11.74	20.94	13.80

Outline Dimensions

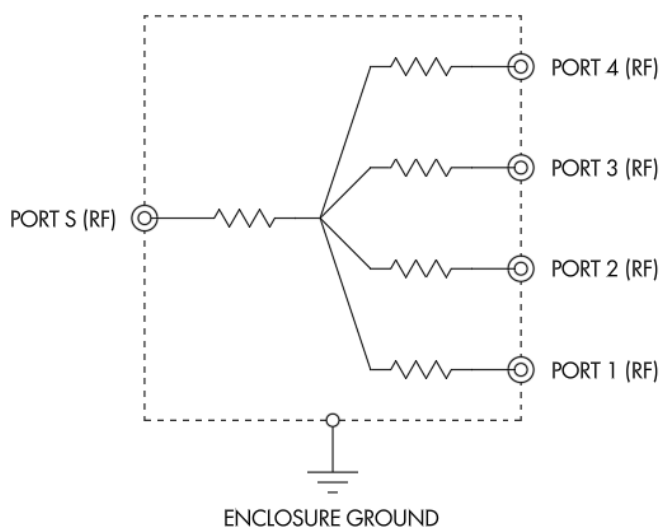


Outline drawing: OL-R06-04

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

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

Simplified Electrical Schematic



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