

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

WMRD12-7.2-S



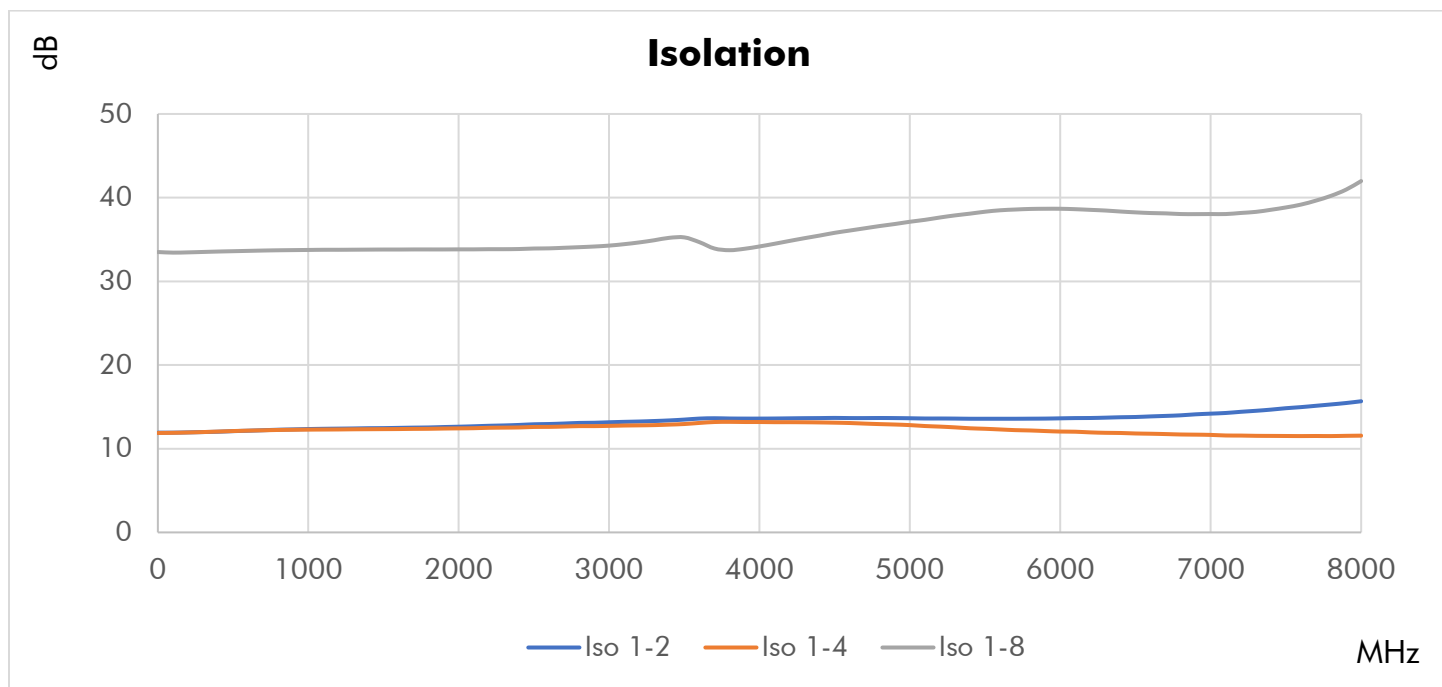
Specifications	Min.	Typ.	Max.	Units
Frequency	DC		7.2	GHz
Impedance		50		Ohm
Return Loss (Port S)	9.5	12		dB
Return Loss (Port 1-12)	9.5	14		dB
Insertion Loss (Total Measured Loss)		21.6	23.1	dB
Isolation (Within Groups: 1-2-3-4 : 5-6-7-8 : 9-10-11-12)		11.9		dB
(Between Groups: 1-2-3-4 : 5-6-7-8 : 9-10-11-12)		33.5		dB
Input Power (CW) ¹ up to +30 °C; derate linearly to +25dBm at +85 °C.			+30	dBm

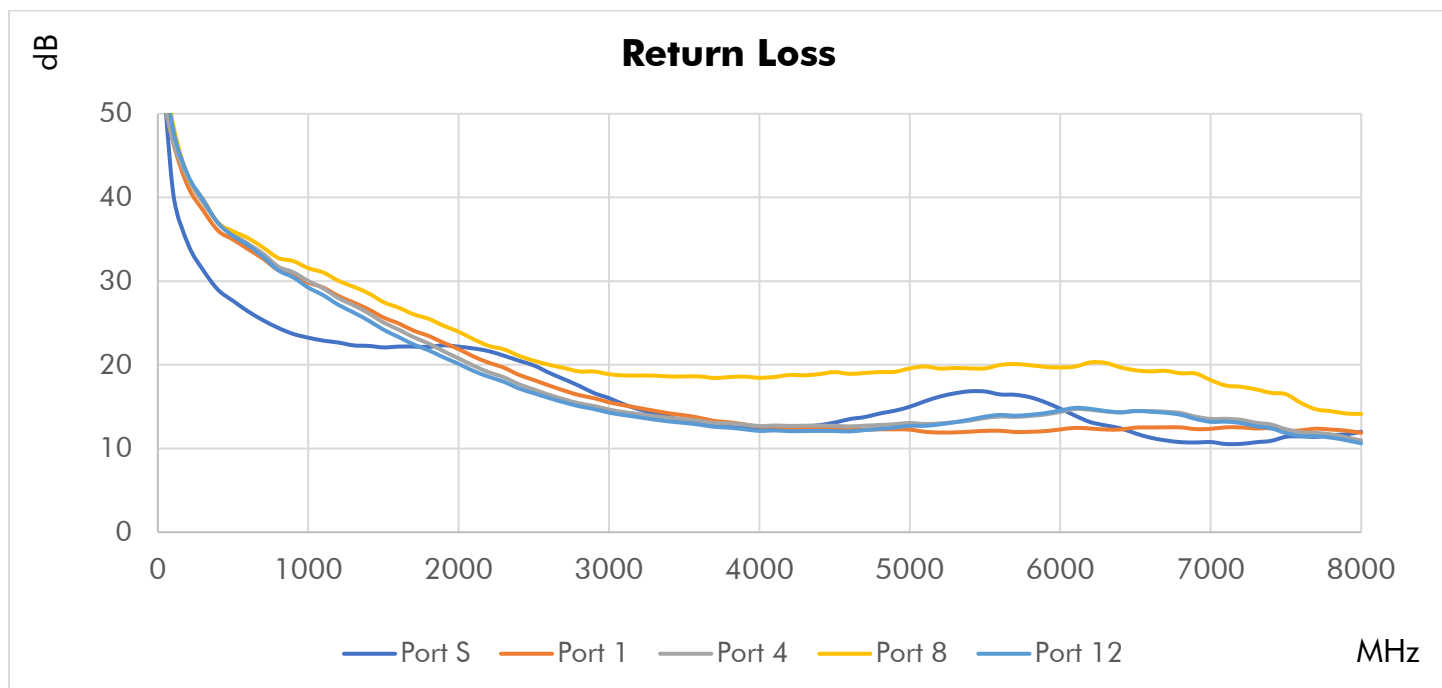
Connector Interface	SMA-Female
Operating Temperature ²	-40 to +85 °C
Storage Temperature	-55 to +100 °C
Nominal Weight	94.6 g (3.34 oz)
Operating Humidity	10-90% (non-condensing)
Operating Environment	Indoor Use Only
CAGE Code	78YZ0

RoHS Status ³	RoHS3 Compliant
REACH Status ³	REACH Unaffected
Enclosure Material	Aluminum
Connectors Material	Brass, Gold Plated
Contacts Material	Beryllium Copper, Gold Plated
Insulators Material	Virgin PTFE
Finish	Green Paint

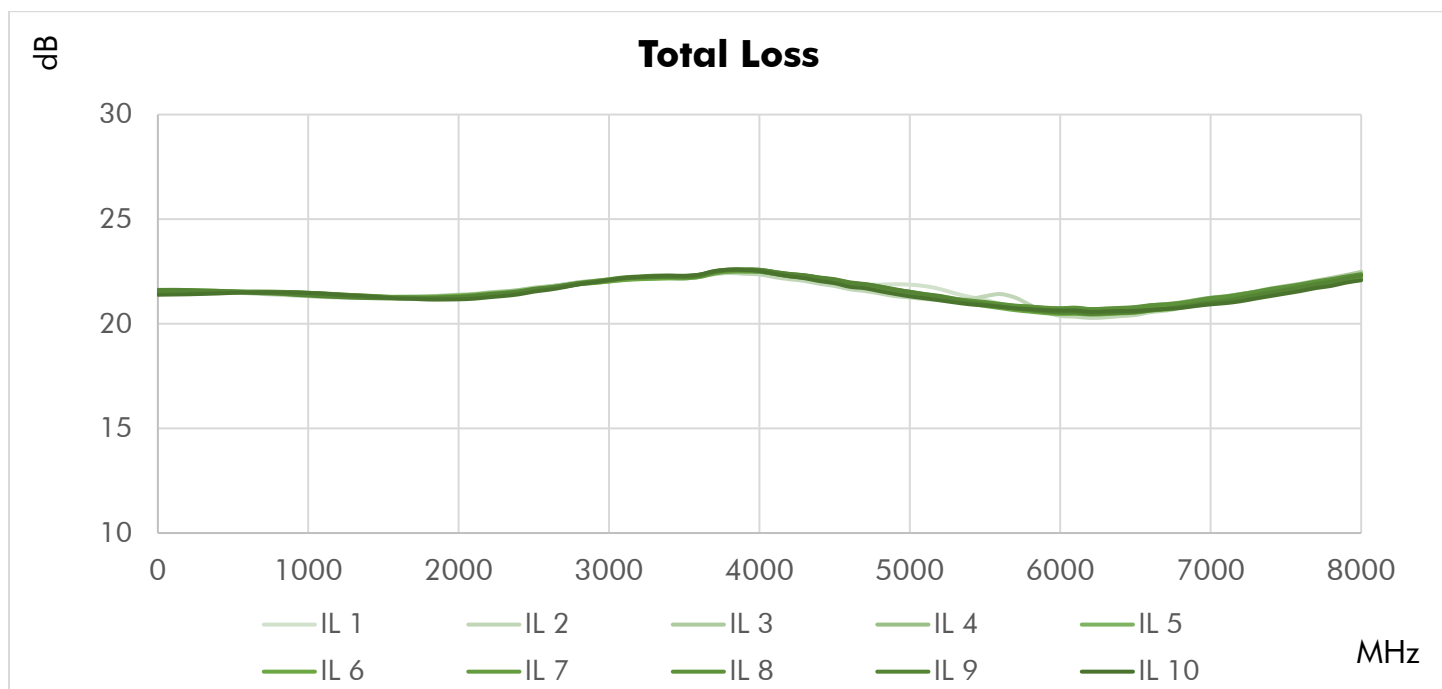
1. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
2. Electrical specifications are tested at +25 °C.
3. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C





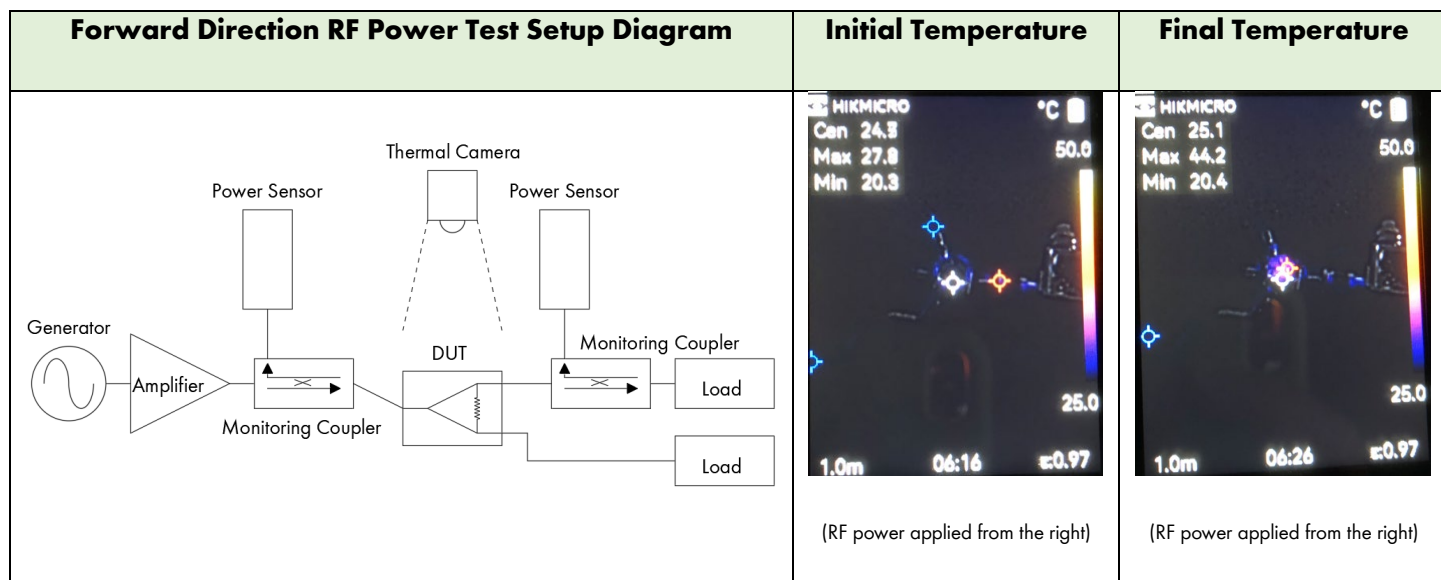
Repeatability in Production



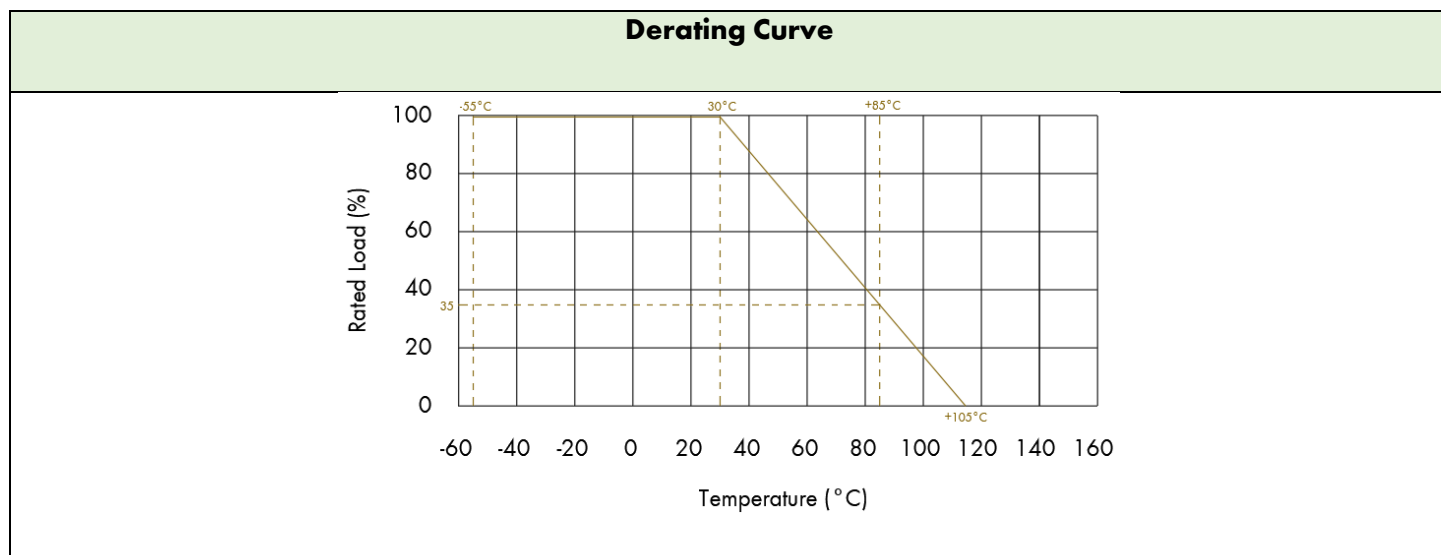
Reliability Testing

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.



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

Simplified Electrical Schematic

