

Resistive Divider, DC-7.2GHz, 5-way, SMA-Female

WMRD05-7.2-S



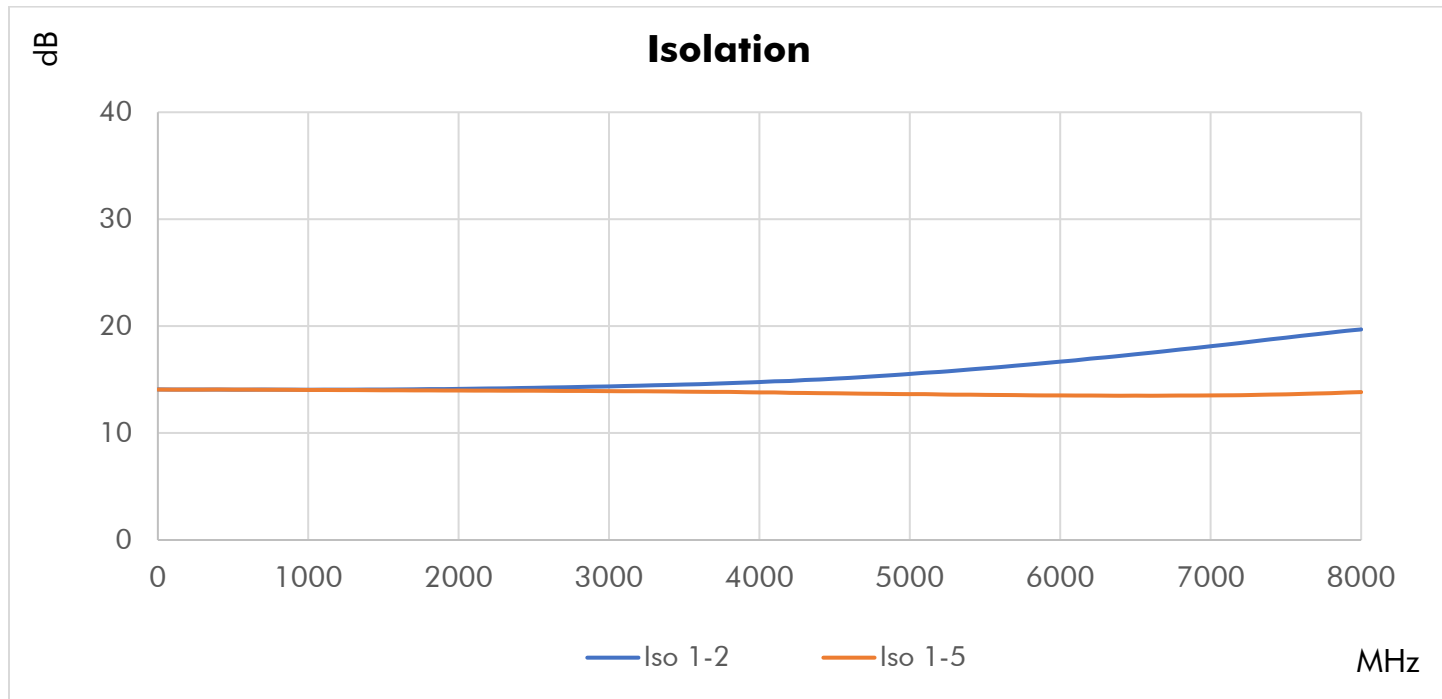
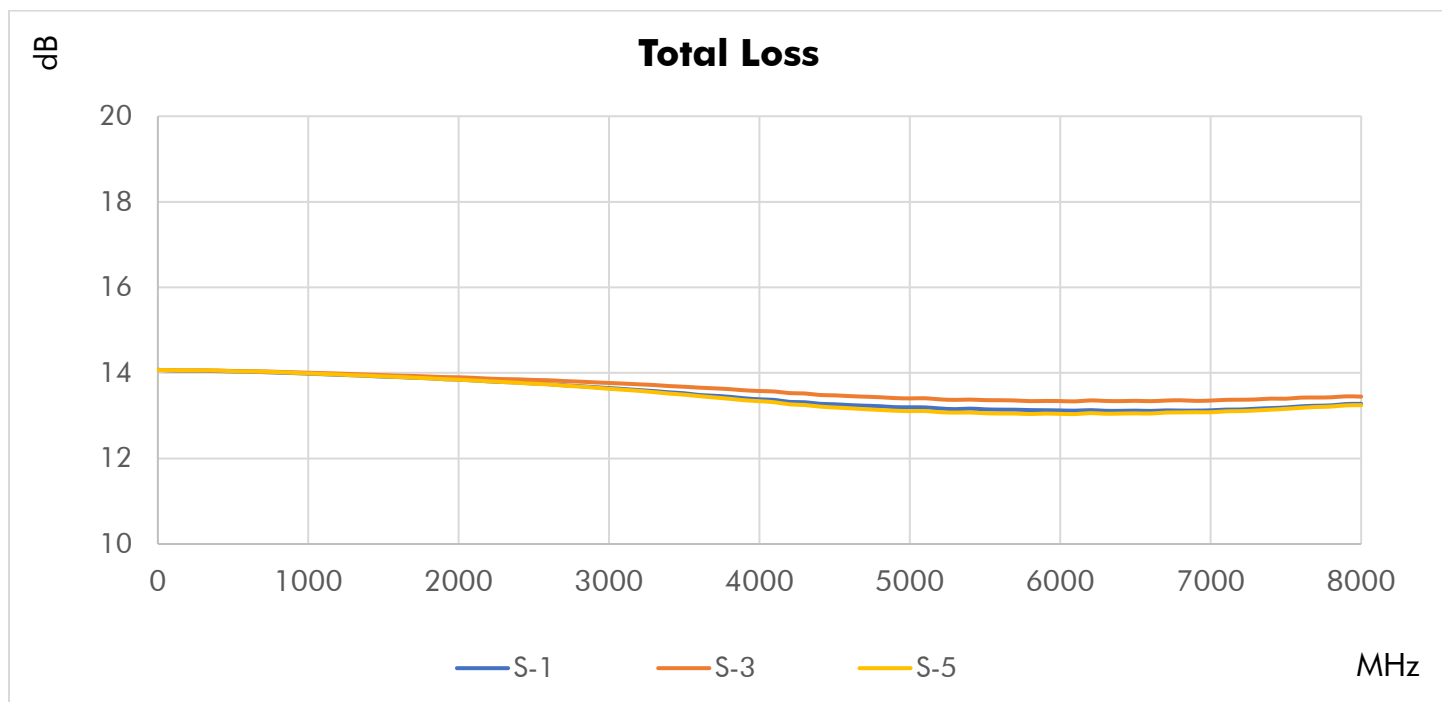
Specifications	Min.	Typ.	Max.	Units
Frequency	DC		7.2	GHz
Impedance		50		Ohm
Return Loss (Port S)	9.5	12		dB
Return Loss (Port 1-2)	9.5	14		dB
Insertion Loss (Total Measured Loss)		14.0	15.2	dB
Isolation		14.0		dB
Input Power (CW) ¹ up to +30°C; derate linearly to +25dBm at +85°C.			+30	dBm

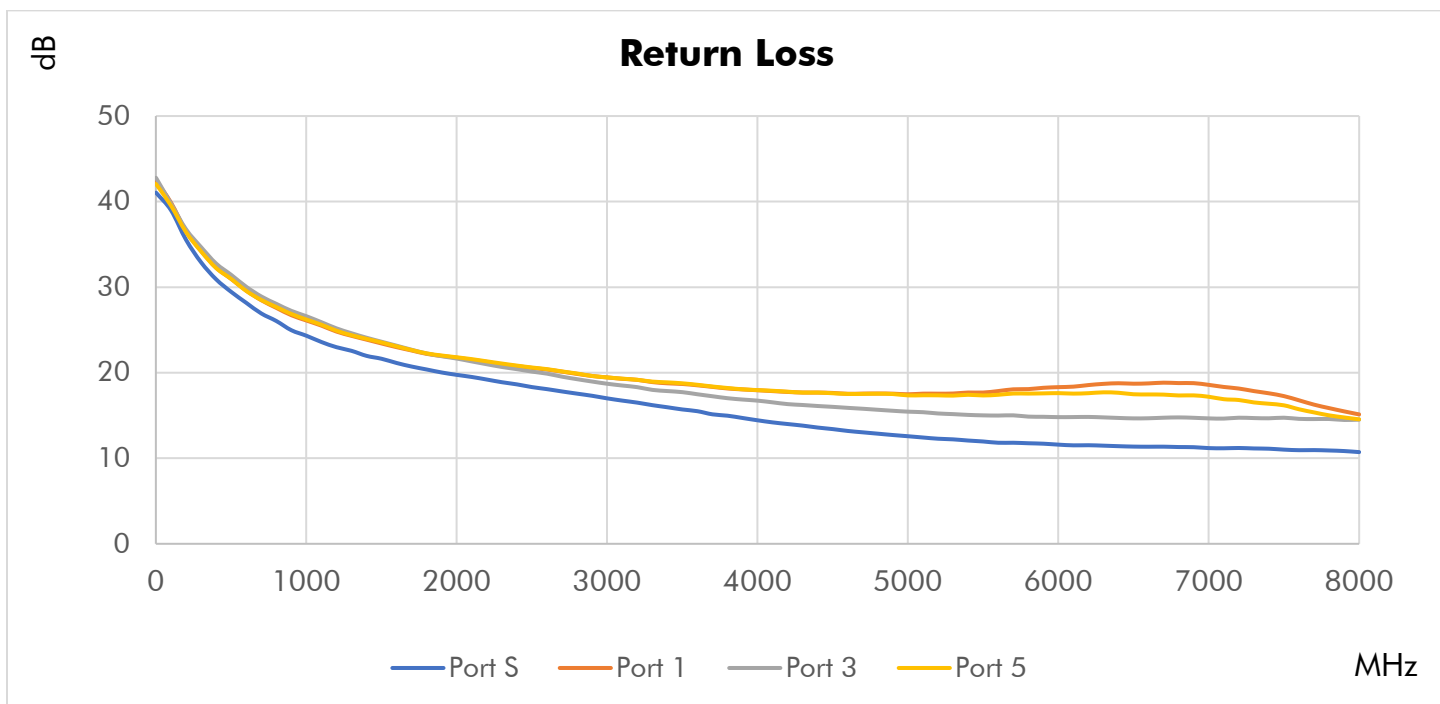
Connector Interface	SMA-Female
Operating Temperature ²	-40 to +85 °C
Storage Temperature	-55 to +100 °C
Nominal Weight	27.4 g (0.97 oz)
Operating Humidity	10-90% (non-condensing)
Operating Environment	Indoor Use Only
CAGE Code	78YZ0

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

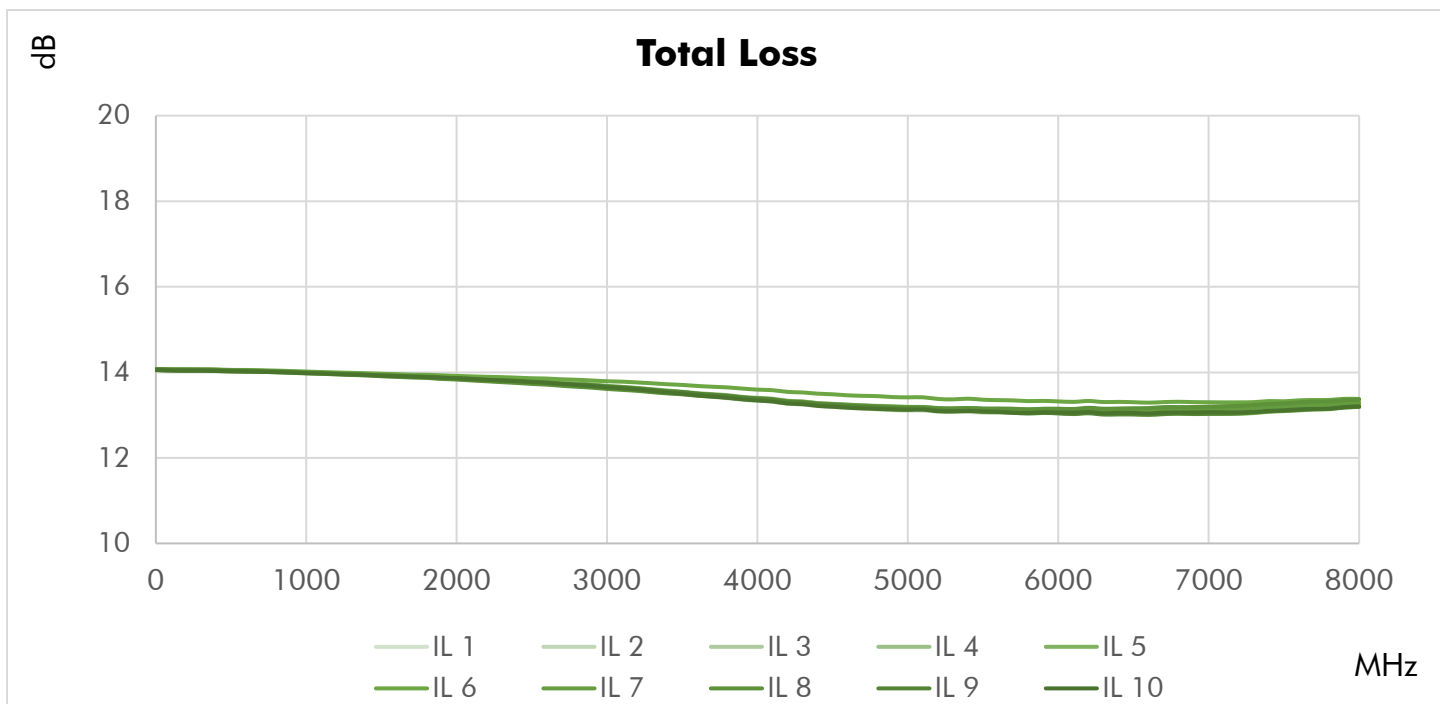
1. All output ports should be terminated in a 50-ohm load with 1.2:1 max VSWR.
2. Electrical specifications are tested at +25 °C.
3. To the best of our knowledge at the time of publication.

Typical Performance at +25 °C





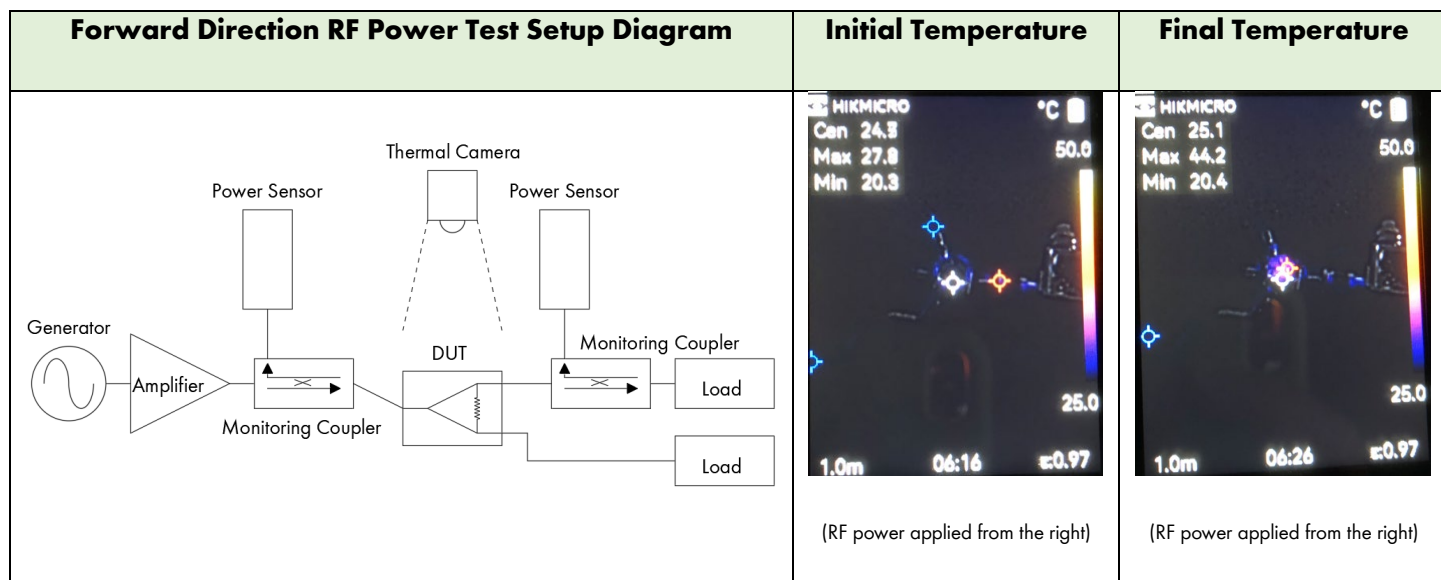
Repeatability in Production



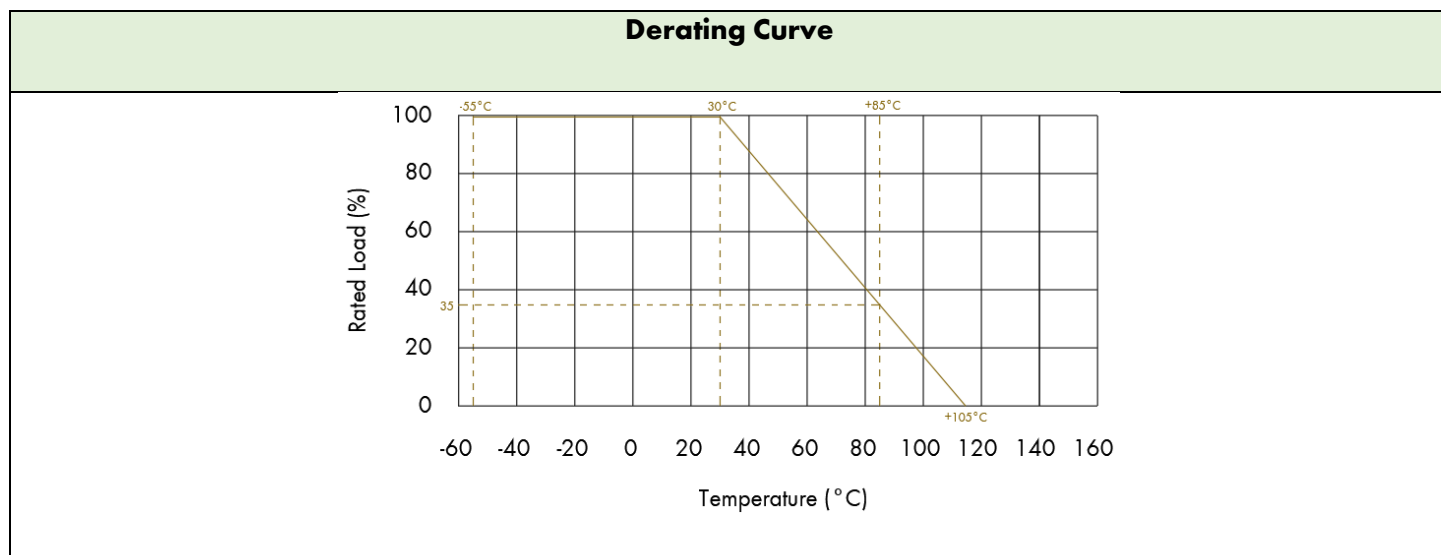
Reliability Testing

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.



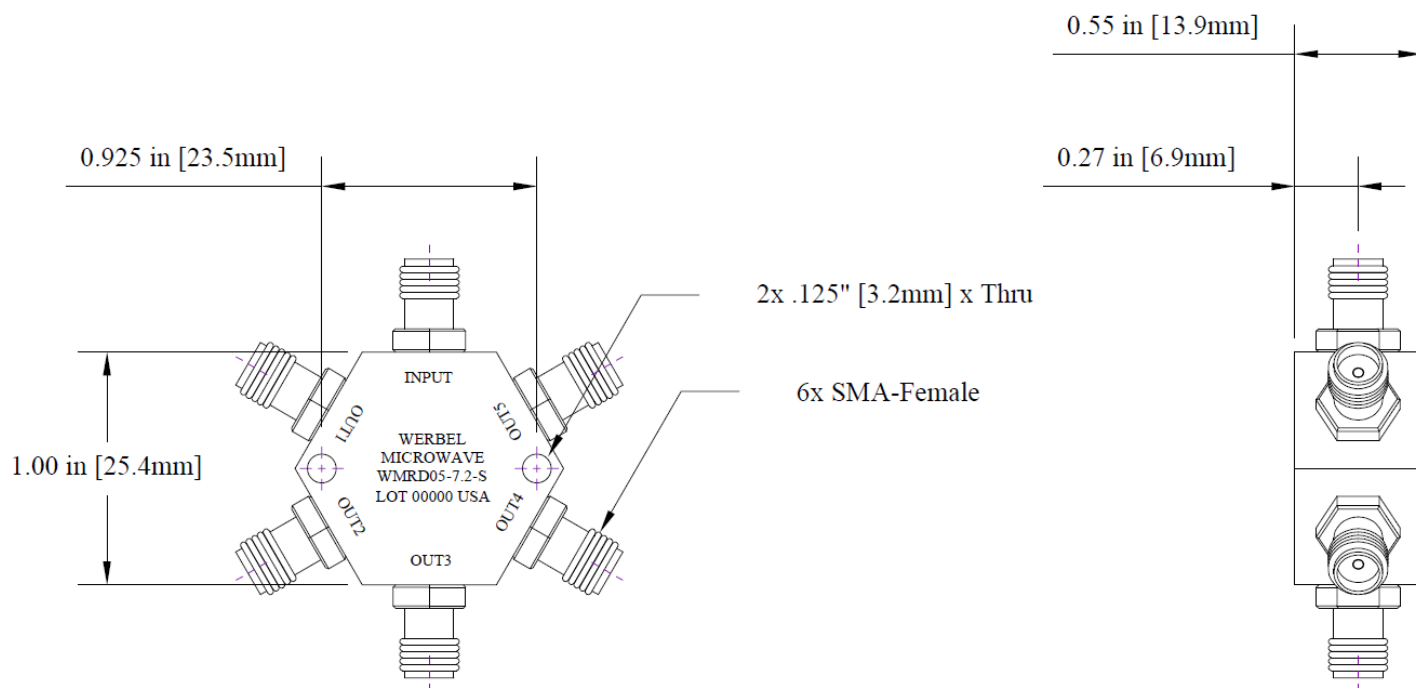
- 0.6 watts CW (shown above) at 500MHz was applied to the DUT input for a duration of 10 minutes.
- The DUT temperature increased from 24.3°C (initial, center marker) to 44.2°C (final, max marker), resulting in a 19.9°C rise.
- 1 watt CW at 500MHz produced a rise temperature of 35°C after 10 minutes.



Typical Performance Data

Frequency (MHz)	Return Loss (dB)			Total Loss (dB)		Isolation (dB)	
	Port S	Port 1	Port 5	S-1	S-5	1-2	1-5
1	41.05	42.46	42.06	14.07	14.07	14.08	14.07
100	38.98	39.87	39.52	14.06	14.06	14.07	14.06
200	35.52	36.53	36.42	14.05	14.06	14.07	14.06
300	32.90	34.23	34.17	14.05	14.06	14.07	14.06
400	30.91	32.27	32.23	14.04	14.05	14.07	14.07
500	29.45	30.96	30.96	14.03	14.04	14.06	14.06
600	28.17	29.59	29.56	14.03	14.03	14.06	14.06
700	26.93	28.47	28.51	14.02	14.03	14.07	14.05
800	26.04	27.58	27.68	14.01	14.02	14.06	14.05
900	24.97	26.72	26.86	14.00	14.00	14.06	14.04
1000	24.32	26.10	26.21	13.98	13.99	14.05	14.03
1500	21.63	23.42	23.54	13.91	13.92	14.07	14.00
2000	19.75	21.75	21.80	13.84	13.84	14.13	13.98
2500	18.32	20.56	20.61	13.75	13.75	14.23	13.96
3000	17.00	19.45	19.45	13.65	13.63	14.36	13.92
3500	15.70	18.68	18.76	13.52	13.49	14.54	13.87
4000	14.44	17.95	17.97	13.38	13.34	14.77	13.80
4500	13.41	17.63	17.60	13.27	13.19	15.09	13.72
5000	12.57	17.48	17.35	13.20	13.11	15.53	13.64
5500	11.96	17.68	17.34	13.15	13.06	16.06	13.57
6000	11.59	18.31	17.61	13.12	13.04	16.68	13.52
6500	11.36	18.71	17.48	13.12	13.05	17.37	13.50
7000	11.19	18.58	17.19	13.13	13.08	18.12	13.52
7500	11.01	17.26	16.19	13.19	13.16	18.92	13.62
8000	10.72	15.12	14.55	13.28	13.25	19.69	13.83

Outline Dimensions

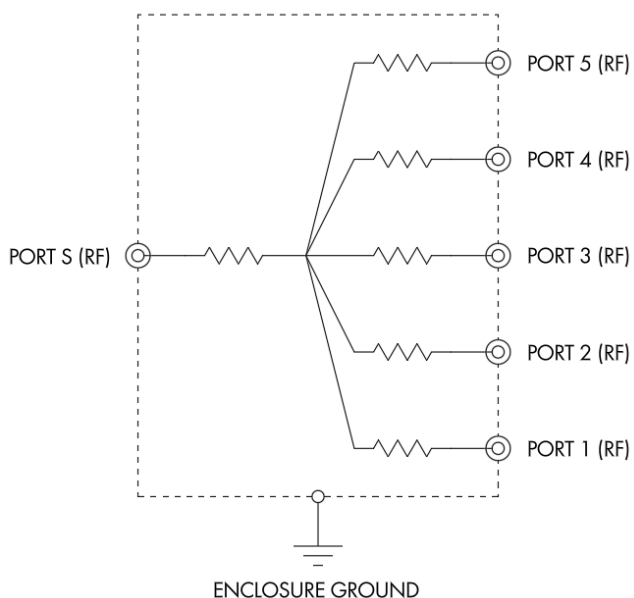


Outline drawing: OL-R06-05

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

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

Simplified Electrical Schematic



The information contained in this document is accurate to the best of our knowledge and representative of the product described herein at the date of publication. It may be necessary to make modifications to the product and/or documentation of the product. Werbel Microwave LLC reserves the right to make such changes as required without notice. Unless otherwise stated, all specifications and dimensions are nominal. Werbel Microwave LLC does not make any representation or warranty regarding the suitability of the product described herein for any particular purpose or application, and Werbel Microwave LLC does not assume any liability arising out of the use of any part of documentation. This document gives only a description of the product(s) and shall not form part of any contract. Please contact a Werbel Microwave LLC Applications Engineer for the most current specification drawing.

Reliability testing was performed as an internal requalification of the product to substantiate the published specifications, which were previously arrived at by calculation and/or similarity to existing products. The results of these tests are provided as a courtesy and shall not form part of a contract or warranty. While reliability tests may depict the product being tested beyond the published specification ratings for the purpose of stress testing the product, this does not imply that the product should be operating above the rated limits for any length of time. Specifications related to reliability (e.g., performance over temperature, power handling, DC current, HI-POT) are "designed to meet" and are not individually tested in production of commercially available products. Please contact a Werbel Microwave LLC Applications Engineer if specific reliability testing is needed on a particular product.