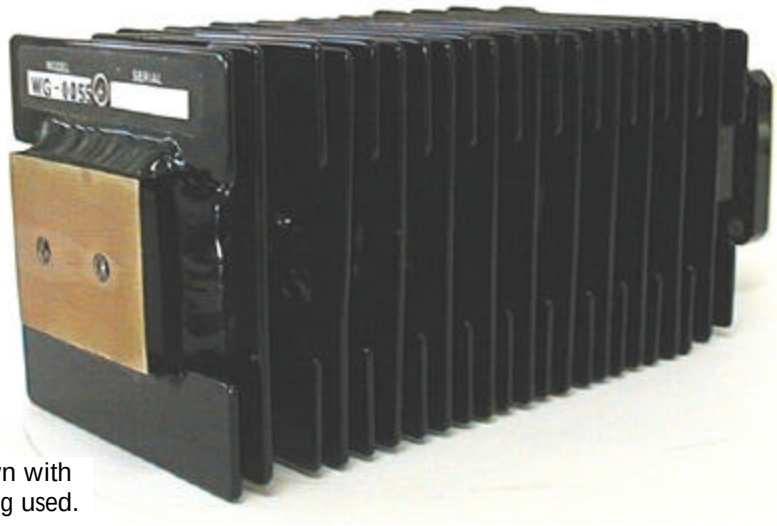
MICROLAB / FXR Waveguide Loads

WG series

Super High Power Dummy Loads
1.12 – 40.0 GHz

- **Extremely Rugged High Power Loads**
- **High Temperature Refractory Load Elements**
- **Optimized Transverse Cooling Fins**
- **Available with most Common Flanges**



WG-0055 shown with
Type II mounting used.

Microlab/FXR WG series dummy loads are optimized versions of the DA loads per MIL-D-3954A or their commercial equivalents. Superior performance is achieved by slight changes in physical dimensions, more efficient fin cooling and increased waveguide pressure. Also, additional mounting in the form of tapped holes with stainless steel inserts are provided at the rear of the loads.

The WF loads employ transverse cooling fins and high temperature refractory load elements designed to meet the requirements of MIL-D-3954A. These load elements are in direct contact with the waveguide walls for optimum heat transfer. They can withstand extremely high temperature, temperature gradients and thermal shocks.

These loads can be supplied to operate over the full indicated waveguide frequency band. Generally faster delivery and a more economical unit can be furnished for use over narrower frequency ranges. Always specify your frequency and VSWR requirements.

In the specifications table, the independent average power rating assumes CW operation, and the independent peak power rating assumes negligible average power. The combined average and peak power ratings should be employed together.

Designs to meet special requirements for bandwidth, size, flanges, etc., are available on request. (11/99)

General Specifications

Dissipative Material:	Refractory
Test Pressure:	50 psig. max.
Housing Finish:	Black Paint Per TT-E-489
Flange Type:	
< 2.6 GHz:	Contact
> 2.6 GHz	Flange Cover
Material:	Aluminum
Flange Finish:	Iridite Per MIL-C-5541

Other Waveguide Loads:

Unfinned Loads:	WE series
Finned Loads Per MIL-D-3954A:	WF series
Liquid Cooled Loads:	WL series
Load Inserts:	WD/WZ

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Model	Frequency Range	Waveguide Size		Power Ratings				VSWR Max.	Approximate Size/Weight Inches/Pounds			
				Independent*		Combined						
		RG	WR	W Avg.	kW peak at 45 psig	W Avg.	kW peak at 30 psig		L in.	W in.	H in.	Wt. lbs.
WG-0005	1.12-1.70	103	650	9000	100,000	6000	20,000	1.15	37.6	8.9	11.4	91
WG-0015	1.70-2.60	105	430	6500	45,000	5000	10,000	1.15	24.4	6.7	8.8	30
WG-0025	2.60-3.95	75	284	5000	19,000	4000	4,000	1.10	16.6	5.4	6.4	12
WG-0035	3.95-5.85	95	187	2500	7,750	1800	1,800	1.10	12.2	3.6	4.1	5.5
WG-0045	5.85-8.20	106	137	1500	4,250	1000	1,000	1.10	9.5	3.1	3.9	3.5
WG-0050	7.05-10.0	68	112	750	2,750	600	750	1.10	7.9	2.5	3.1	1.7
WG-0055	8.20-8.50 8.50-12.4	67	90	650	1,750	500	350	1.15 1.10	6.7	2.8	2.8	1.4
WG-0065	12.4-18.0	349	62	400	1,000	250	250	1.10	4.7	2.4	2.4	0.75
WG-0075	18.0-26.5	121	42	300	350	150	100	1.15	4.5	2.2	2.2	0.37
WG-0085	26.5-40.0	96†	28	300	175	100	75	1.20	4.5	2.0	2.0	0.37

† Aluminum Equivalent *See text on power ratings

Mounting

Model	Frequency Range	Mounting		
		Type	Dimension "A" (inches)	Thread Size x Depth
WG-0005	1.12-1.70	I	5.0	1/4-20 x 3/8
WG-0015	1.70-2.60	II	3.0	1/4-20 x 3/8
WG-0025	2.60-3.95	II	1.5	1/4-20 x 3/8
WG-0035	3.95-5.85	II	1.5	1/4-20 x 3/8
WG-0045	5.85-8.20	II	1.0	1/4-20 x 3/8
WG-0050	7.05-10.0	II	0.8	8-32 x 5/16
WG-0055	8.20-12.4	II	0.8	8-32 x 5/16
WG-0065	12.4-18.0	II	0.6	6-32 x 3/16
WG-0075	18.0-26.5	III	-	6-32 x 3/16
WG-0085	26.5-40.0	III	-	6-32 x 3/16

Mounting Types