



# DOUBLE-RIDGE WAVEGUIDE TERMINATIONS R80 SERIES

DATA  
SHEET  
No.T9E  
1 of 2

- LOW VSWR
- FULL BANDWIDTH
- COMPLETE SELECTION

## DESCRIPTION



MEC Double-Ridge Waveguide Terminations cover the full frequency band with low VSWR in seven models of increasing power capability:

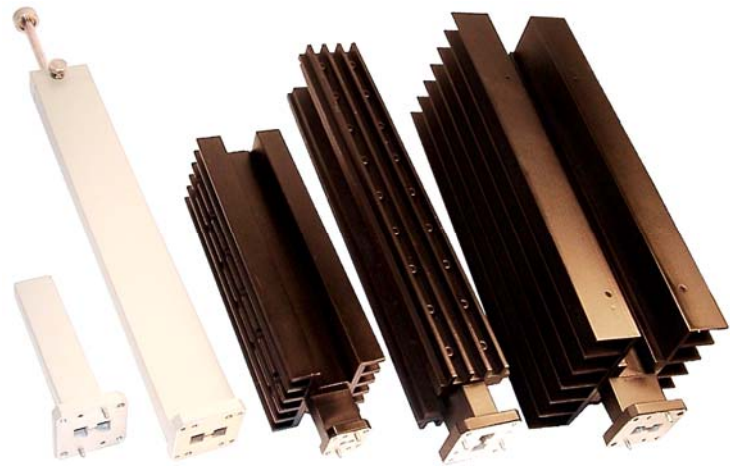
- 1- (L) Low power having lowest VSWR for precision laboratory measurement needs.
- 2- (LS) Low power with a sliding load element, adjustable over more than half a guide wavelength at the lowest frequency. Optional scale or vernier may be provided.
- 3- (M) Medium power, higher than standard laboratory equipment but not high enough to require external fins.
- 4- (X) High power, finned for passive cooling.
- 5- (E) Extra high power, more finned for passive cooling and or auxiliary forced-air cooling in customer's installation.
- 6- (F) Fan-cooled for power levels above 1 KW. They are provided with an integral air fan for forced-air cooling and a cord or connector for AC or DC power.
- 7- (WJ) Water or Liquid Cooled where a built-in coolant jacket cools the internal RF absorber.
- 8- (W) True Water or Liquid Load where the water or coolant is itself the actual absorber of input RF power.

Liquid cooled models (W) & (WJ) operate at typical inlet coolant pressure of 10 PSIG, flow rate of 0.5 Gallon per minute for every 1 kW of CW or average input RF power and inlet coolant temperature of 10 to +65°C. Coolants may be ordinary tap water, ethylene Glycol/water mixture, PAO etc.

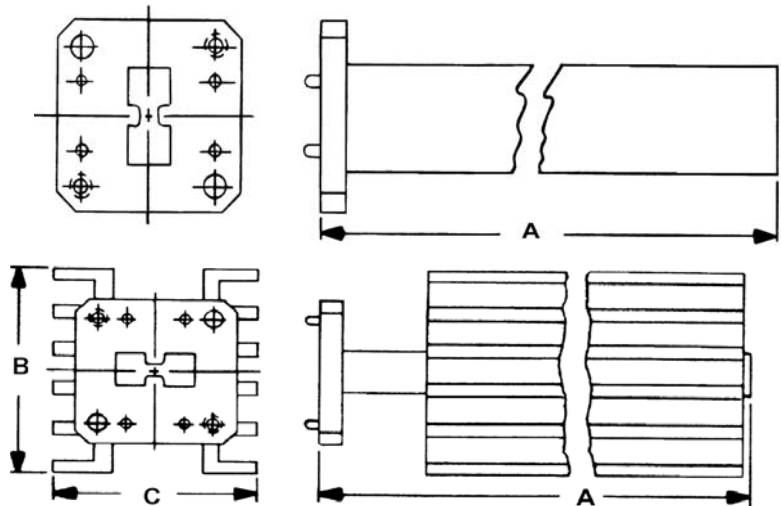
Standard flanges are cover type with alternate tapped and clearance holes, MEC-C1 Series. Other flanges may be requested. Finish is chromate conversion per MIL-C-5541, Class 3. Paint is epoxy enamel; color is gray for the (L) & (LS) series and black for all others.

A power sampler can be incorporated in any of the terminations. Sampling levels range from 30 to 50 dB with typical flatness of  $\pm 0.5$  dB over an octave band. For power sampling option add "PS" to the model number.

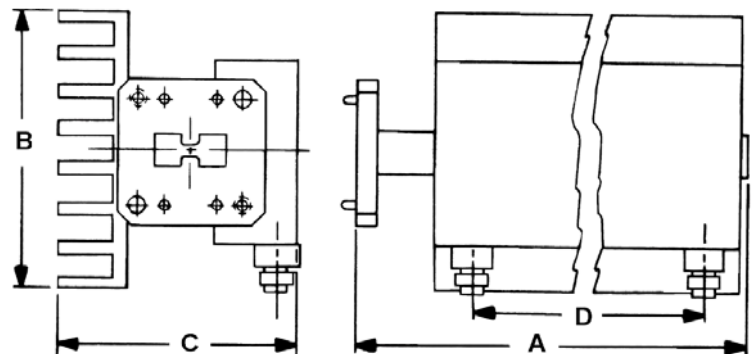
Some of the standard models are listed in the table. For terminations with custom size, heat sink, cooling fan or other options, please contact us.



### R80-X & R80-E SERIES



### R80-WJ SERIES Fin configurations may vary.





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MODEL NUMBER	FREQUENCY RANGE (GHz)	WAVEGUIDE SIZE	MAX. AV. POWER (WATTS)	VSWR (MAX.)	DIMENSIONS (MAX. IN.)				LIQUID COOLANT	
					A	B	C	D	FLARED TUBE SIZE	FITTING PER MS33656E()
R85-L	18.0-40.0	WRD-180C24	3	1.08	2.20	—	—	—	—	—
R85-M			20	1.09	4.50	—	—	—	—	—
R85-X			125	1.10	7.25	2.10	1.95	—	—	—
R85-E			250	1.10	7.25	2.10	1.95	—	—	—
R86-L	11.0-26.5	WRD-110C24	3	1.04	3.00	—	—	—	—	—
R86-M			30	1.05	6.50	—	—	—	—	—
R86-X			125	1.05	9.50	2.10	2.15	—	—	—
R86-E			250	1.06	9.50	2.10	2.15	—	—	—
R80-LS	7.5-18.0	WRD-750D24	5	1.04	10.00	—	—	—	—	—
R80-L			5	1.04	4.00	—	—	—	—	—
R80-M			50	1.05	8.30	—	—	—	—	—
R80-X			400	1.05	10.50	2.10	2.30	—	—	—
R80-E			700	1.07	10.50	4.60	3.20	—	—	—
R80-WJ			1,500	1.08	10.50	4.60	2.80	8.00	¼"	4
R80-W			.7-6K	1.08	Contact factory					
R87-LS	6.5-18.0	WRD-650D28	5	1.04	10.00	—	—	—	—	—
R87-L			5	1.04	4.00	—	—	—	—	—
R87-M			50	1.05	8.30	—	—	—	—	—
R87-X			400	1.05	10.50	2.10	2.30	—	—	—
R87-E			700	1.07	10.50	4.60	3.20	—	—	—
R87-WJ			1,500	1.08	10.50	4.60	2.80	8.00	¼"	4
R87-W	.7-6K	1.08	Contact factory							
R88-LS	5.8-16.0	WRD-580D28	5	1.04	10.00	—	—	—	—	—
R88-L			5	1.04	4.00	—	—	—	—	—
R88-M			50	1.05	8.30	—	—	—	—	—
R88-X			400	1.05	11.25	2.10	2.40	—	—	—
R88-E			700	1.07	10.50	4.60	3.30	—	—	—
R88-WJ			1,500	1.08	10.50	4.60	2.90	8.00	¼"	4
R88-W			.7-6K	1.08	Contact factory					
R81-LS	4.75-11.0	WRD-475D24	5	1.03	13.50	—	—	—	—	—
R81-L			5	1.03	8.75	—	—	—	—	—
R81-M			50	1.05	8.75	—	—	—	—	—
R81-X			500	1.05	12.00	2.10	3.00	—	—	—
R81-E			900	1.07	12.00	4.60	4.00	—	—	—
R81-WJ			2,000	1.08	12.00	4.60	3.50	9.70	¼"	4
R81-W			.9-8K	1.08	Contact factory					
R89-LS	4.75-11.0	DR-19	5	1.03	13.50	—	—	—	—	—
R89-L			5	1.03	8.75	—	—	—	—	—
R89-M			50	1.05	8.75	—	—	—	—	—
R89-X			500	1.05	12.00	2.10	3.00	—	—	—
R89-E			900	1.07	12.00	4.60	4.00	—	—	—
R89-WJ			2,000	1.08	12.00	4.60	3.50	9.70	¼"	4
R89-W			.9-8K	1.08	Contact factory					
R82-LS	3.5-8.2	WRD-350D24	5	1.03	16.00	—	—	—	—	—
R82-L			5	1.03	10.50	—	—	—	—	—
R82-M			70	1.05	10.50	—	—	—	—	—
R82-X			600	1.05	13.10	2.10	3.20	—	—	—
R82-E			1,000	1.07	13.10	4.60	4.05	—	—	—
R82-WJ			3,000	1.08	13.10	4.60	3.80	10.74	½"	8
R82-W			1-12K	1.08	Contact factory					
R83-LS	2.0-4.8	WRD-200D24	10	1.03	21.00	—	—	—	—	—
R83-L			10	1.03	12.00	—	—	—	—	—
R83-M			70	1.05	12.00	—	—	—	—	—
R83-X			700	1.08	18.00	2.10	5.60	—	—	—
R83-E			1,200	1.08	18.00	4.60	5.60	—	—	—
R83-WJ			5,000	1.10	18.00	4.60	5.25	14.52	½"	8
R83-W			1-20K	1.10	Contact factory					

