

Traveling-Wave Tubes

Technical Information

1-6-65 DS-310
 ZM-3392 ZM-3396
 ZM-3393 ZM-3397
 ZM-3394 ZM-3398
 ZM-3395 ZM-3399

- HIGH POWER
- L-BAND
- PPM FOCUSING

RF PERFORMANCE

Tube Type	Frequency Range (Gc)	Min. Peak Saturated Power Output (kw)	Maximum Duty	Maximum Pulse Width (μ sec)	Minimum Saturated Gain (db)	Data Group
ZM-3392	1.2 - 1.5	5	0.05	20	36	L-1
ZM-3393	1.2 - 1.5	5	0.05	20	36	L-2
ZM-3394	1.2 - 1.5	5	0.05	20	50	L-3
ZM-3395	1.2 - 1.5	5	0.05	20	50	L-4
ZM-3396	1.2 - 1.5	10	0.05	20	36	L-5
ZM-3397	1.2 - 1.5	10	0.05	20	36	L-6
ZM-3398	1.2 - 1.5	10	0.05	20	50	L-7
ZM-3399	1.2 - 1.5	10	0.05	20	50	L-8

FEATURES

high efficiency
 high gain
 broadband
 periodic permanent magnet focusing
 metal-ceramic construction
 ring-loop circuit
 military environments
 lightweight

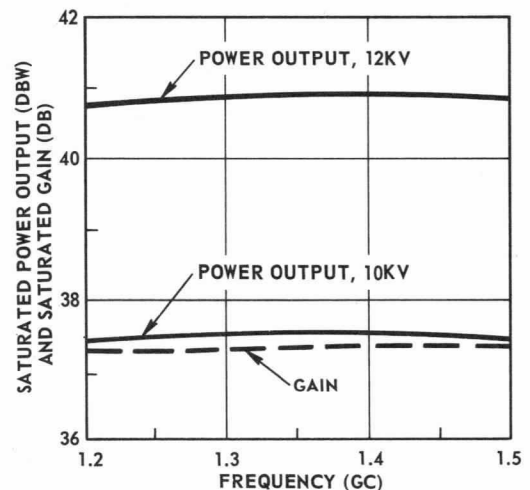
APPLICATIONS

radar
 ecm

MECHANICAL & MISCELLANEOUS

VSWR, max. (cold)			
Input	2.0		
Output	2.0		
Cath. -to-ground, pf (max)	20		
Mounting position	Any		
RF Connectors	Type N, female		
Data Group	L-1, 2, 5, 6	L-3, 4, 7, 8	
Phase shift, deg/1% change in cath. voltage (max)	40	50	
Weight, lb.	12	16	
Over-all length, in.	25	31	
Data Group	L-1, 3, 5, 7	L-2, 4	L-6, 8
Cooling			
Liquid, flow, gpm.	0.5	---	---
Forced air, cfm (sea level)	---	60	100

TYPICAL CHARACTERISTICS



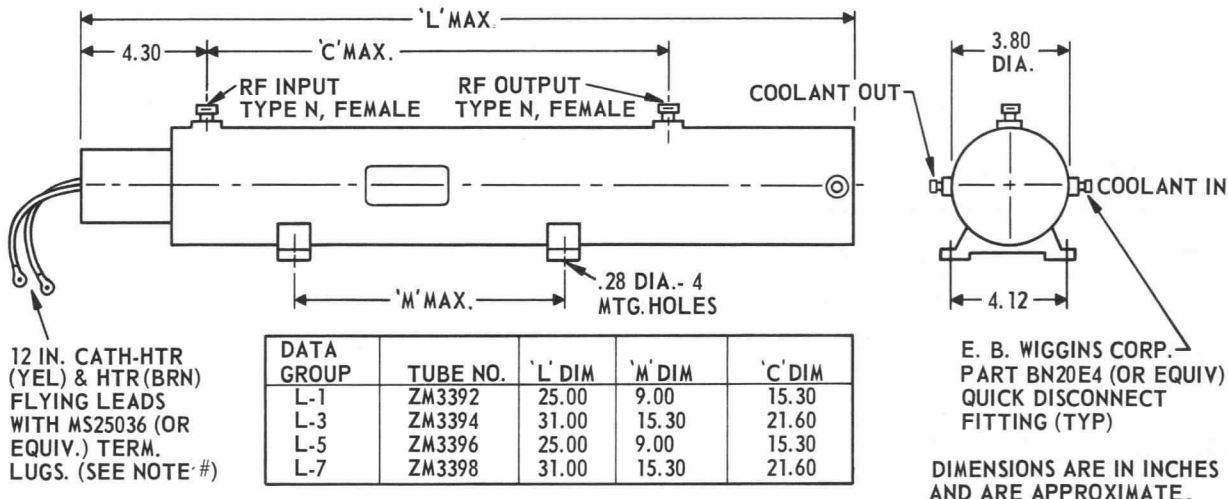
OPERATING CONDITIONS*

Data Group	L-1, 2, 3, 4	L-5, 6, 7, 8
Htr. vac or vdc.....	6.3	6.3
Htr. amp (max).....	3.0	3.0
Cathode kv dc #.....	-9.5 to -10.5	-11.5 to -12.5
Peak cathode amp (max)	3.0	4.0

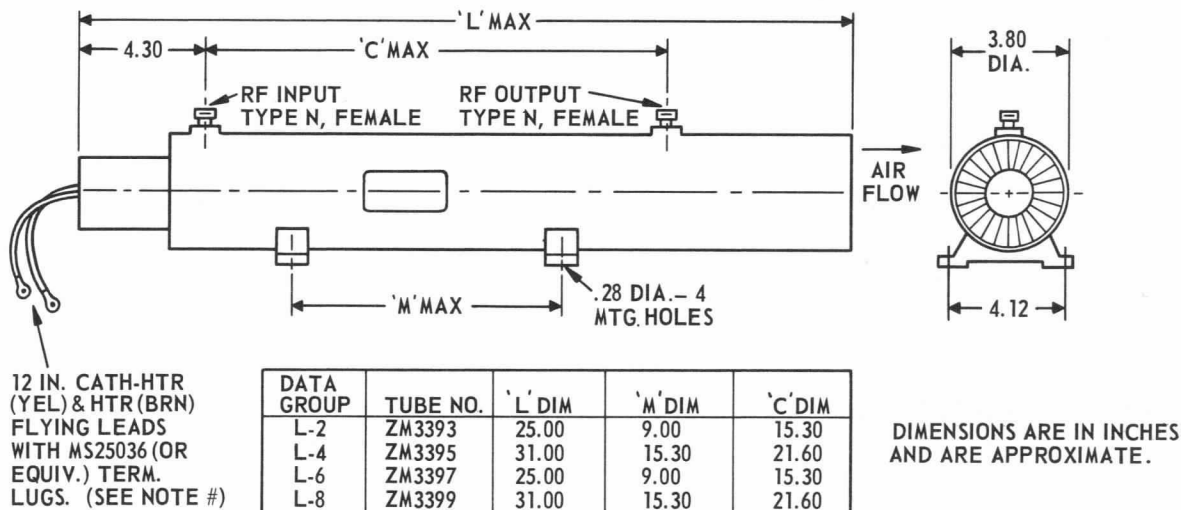
ENVIRONMENTAL

Shock.....	30 g, 11 msec (energized)
Vibration.....	0.06 in.D. A., (operating) 5-23 cps
Temp., ambient	
(operating).....	-54 to +71°C
(storage).....	-62 to +95°C
Altitude.....	70,000 feet (operating)

OUTLINE (GROUPS L-1, L-3, L-5, L-7)



OUTLINE (GROUPS L-2, L-4, L-6, L-8)



NOTES

* For the performance ratings specified, the cathode voltage should be adjusted to the value specified by instructions accompanying each tube. This value will be within the applicable range given above.

Cathode voltage is with respect to ground. The anode, r-f circuit, and collector are connected to the tube package which must be grounded prior to application of voltages.

These data are subject to change without notice.