ZM-3392 ZM-3396
ZM-3393 ZM-3397
ZM-3394 ZM-3398
ZM-3395 ZM-3399

Traveling-Wave Tubes

Technical Information

- 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

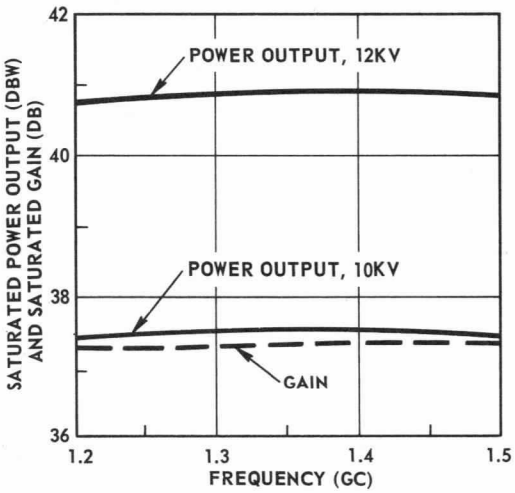
MECHANICAL & MISCELLANEOUS

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



GENERAL ELECTRIC

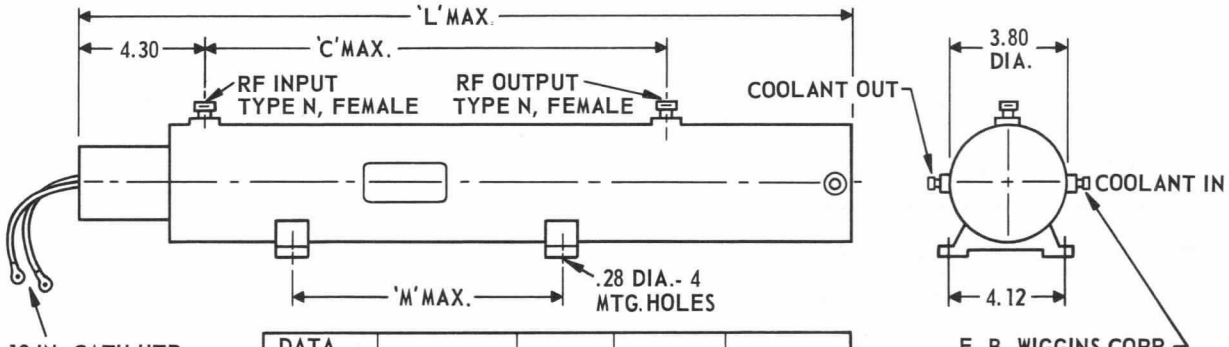
OPERATING CONDITIONS *

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

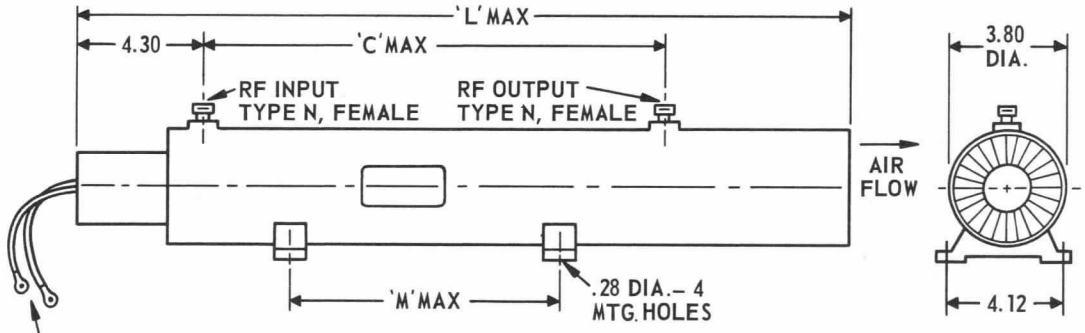
OUTLINE (GROUPS L-1, L-3, L-5, L-7)



DATA GROUP	TUBE NO.	'L' DIM	'M' DIM	'C' DIM
L-1	ZM3392	25.00	9.00	15.30
L-3	ZM3394	31.00	15.30	21.60
L-5	ZM3396	25.00	9.00	15.30
L-7	ZM3398	31.00	15.30	21.60

DIMENSIONS ARE IN INCHES AND ARE APPROXIMATE.

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



DATA GROUP	TUBE NO.	'L' DIM	'M' DIM	'C' DIM
L-2	ZM3393	25.00	9.00	15.30
L-4	ZM3395	31.00	15.30	21.60
L-6	ZM3397	25.00	9.00	15.30
L-8	ZM3399	31.00	15.30	21.60

DIMENSIONS ARE IN INCHES AND ARE APPROXIMATE.

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.

TUBE DEPARTMENT

GENERAL ELECTRIC

Owensboro, Kentucky