

Traveling-Wave Tubes

Technical Information

- LOW NOISE
- P&L-BAND
- PPM FOCUSED

RF PERFORMANCE

Tube Type	Frequency Range (Gc)	Maximum Noise Figure (db)	Minimum Small Signal Gain (db)	Minimum Saturation Power Output (mw)	Data Group
ZM-3377	775-1.45	11	28	10	2
ZM-3350	1.0-2.0	10	30	10	1
ZM-3351	1.2-1.4	8	35	10	1
ZM-3352	1.7-2.4	9	35	10	1

FEATURES

lowest noise
broadband
periodic permanent magnet focusing
military environments
lightweight
crystal mixer protection

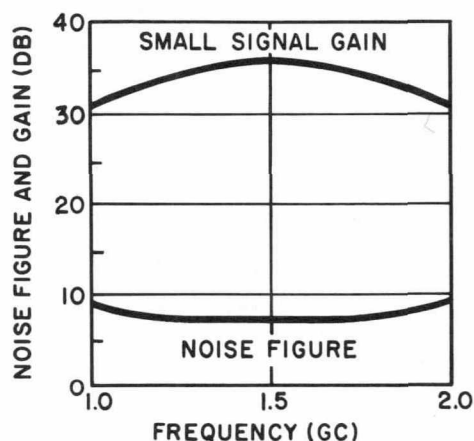
APPLICATIONS

radar
ecm
instrumentation
communications
radiometry

MECHANICAL & MISCELLANEOUS

VSWR, max
Input 2.0
Output 2.0
Mounting Position Any
Weight, lb 3.5
Overall Length, in. 15.5
Cooling Convection
RF Connectors Type TNC
Power Connection Winch'r M12P or equiv.
Collector Connection Winch'r PM1PLS or equiv.

TYPICAL CHARACTERISTICS



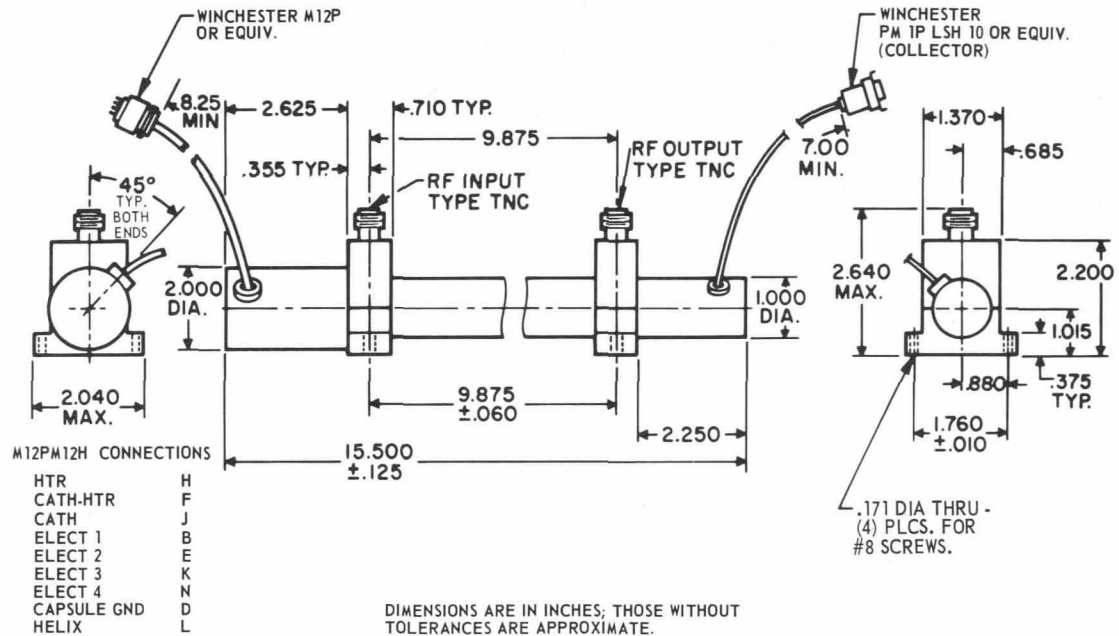
OPERATING CONDITIONS*

Data Group	Gr. 1	Gr. 2
Htr, vac or vdc.....	6.3	6.3
Htr, amp (max.).....	0.35	0.35
Elect. 1, vdc.....	-40 to 0	-40 to 0
Elect. 2, vdc.....	10-50	10-40
Elect. 3, vdc.....	25-125	25-250
Elect. 4, vdc.....	25-250	25-250
Helix, vdc.....	300-400	200-300
Helix, μ a (max.).....	100	100
Collector, vdc.....	300-650	200-450
Beam, μ a (max.).....	1500	1600

ENVIRONMENTAL

Shock.....	50 G, 12 ms, (energized) 3 axes
Vibration.....	15 G, 55 to (operating) 3000 cps
Temp, Ambient....	-60 C to (operating) +71 C
Altitude.....	100,000 ft. (operating)
Acoustic Noise.....	135 db, 25 to (operating) 12,000 cps

OUTLINE



NOTES

- * All voltages may be isolated from ground; i. e., it is not necessary to operate the cathode, helix, collector, or any other electrode at ground potential. Voltages shown are measured with respect to cathode. For minimum noise and optimum gain characteristics, voltages should be adjusted to values specified by instructions accompanying each tube.

These data are subject to change without notice.