

Traveling-Wave Tubes

Technical Information

RF PERFORMANCE

Tube Type	Frequency Range (Gc)	Maximum Noise Figure (db)	Minimum Small Signal Gain (db)	Minimum Saturation Power Output (mw)
ZM-3270	7.0 - 8.5	8.0	35	10
ZM-3266	7.0 - 11.0	8.0	30	10
ZM-3265	7.0 - 12.0	9.0	30	3
ZM-3271	7.5 - 8.5	7.5	35	10
ZM-3267	8.0 - 12.0	8.5	30	5
ZM-3268	8.5 - 9.6	7.5	35	10
ZM-3272	9.0 - 10.0	8.0	33	10

- LOW NOISE
- X-BAND
- PPM FOCUSING

FEATURES

low noise
broad bandwidth
periodic permanent magnet focusing
metal-ceramic construction
military environments
light weight
crystal mixer protection

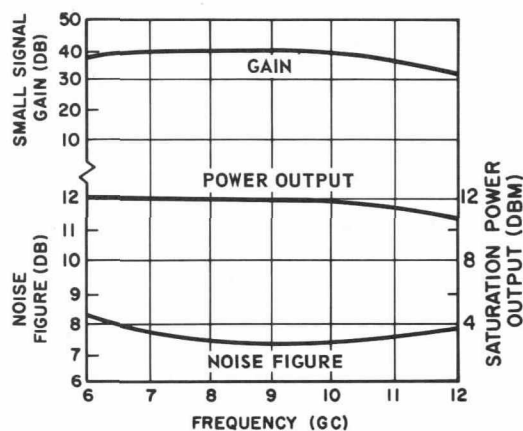
APPLICATIONS

radar
ecm
instrumentation
communications
radiometry

MECHANICAL & MISCELLANEOUS

VSWR, max	
Input.....	2.5
Output.....	2.5
Mounting position.....	Any
Weight, lb.....	5.5
Over-all length, in.....	11.0
Cooling.....	Convection
Connectors	
RF input.....	Type N
RF output.....	Type N
DC.....	Winch'r M12P or equiv.
Collector.....	Winch'r PM1PLS or equiv.

TYPICAL CHARACTERISTICS



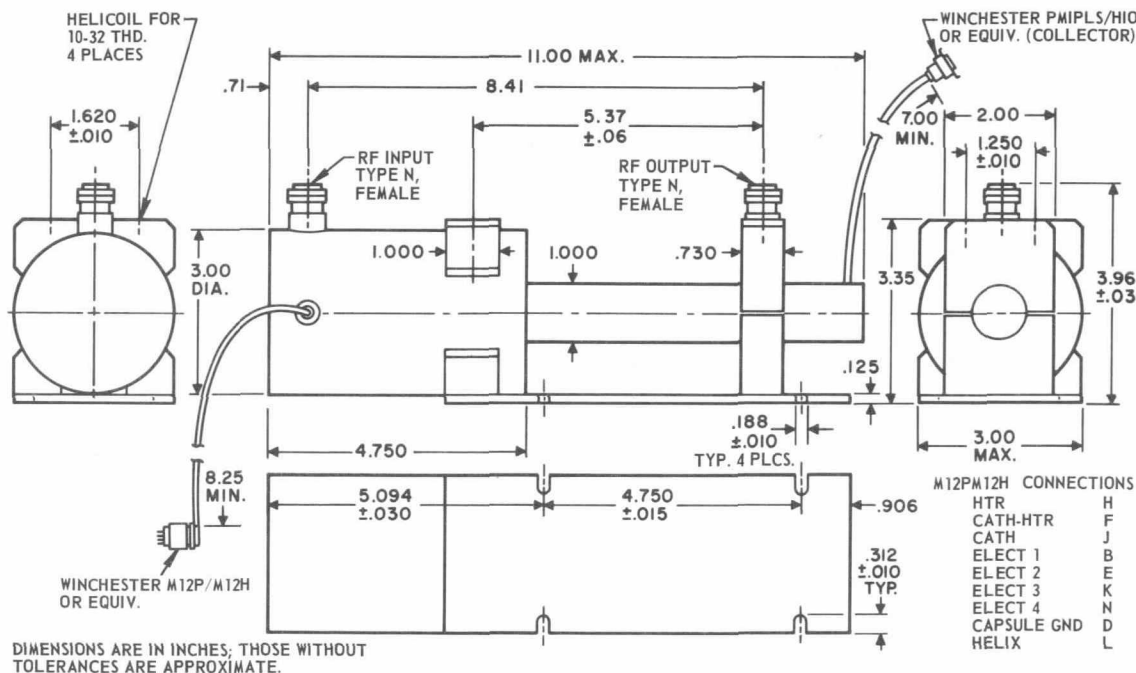
OPERATING CONDITIONS*

Htr. vac or vdc.....	6.3
Htr. amp (max)	0.35
Elect. 1, vdc.....	0 to -25
Elect. 2, vdc.....	0 to 75
Elect. 3, vdc.....	0 to 200
Elect. 4, vdc.....	50 to 400
Helix, vdc.....	700 to 900
Helix, μ a (max.)	150
Collector, vdc.....	900 to 1100
Beam, μ a (max.).....	1000

ENVIRONMENTAL

Shock.....	30 G, 11 ms
(energized)	3 axes
Vibration.....	15 G, 70 to
(operating)	2,000 cps
Temp. Ambient†	-65 C to
(operating)	+100 C
Altitude.....	100,000 ft.
(operating)	
Acoustic Noise	135 db, 25 to
(operating)	12,000 cps

OUTLINE



NOTES

- * Voltages shown are measured with respect to cathode. All voltages may be isolated from ground. For minimum noise and optimum gain characteristics, voltages should be adjusted to values specified by instructions accompanying each tube. These values will be within the ranges given above.
 - † Some degradation of performance may occur under extremes of indicated environmental conditions.
- These data are subject to change without notice.