

Traveling-Wave Tubes

Technical Information

RF PERFORMANCE

Tube Type	Frequency Range (Gc)	Maximum Noise Figure (db)	Minimum SS Gain (db)	Minimum Saturation Power Output (mw)
ZM-3245	4.0 - 8.0	11	30	10
ZM-3246	4.3 - 7.35	10	30	10
ZM-3247	5.0 - 7.0	10	33	10
ZM-3248	5.0 - 6.0	9	33	10
ZM-3249	4.4 - 5.0	9.5	33	10

- LOW NOISE
- C-BAND
- PPM FOCUSED

FEATURES

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

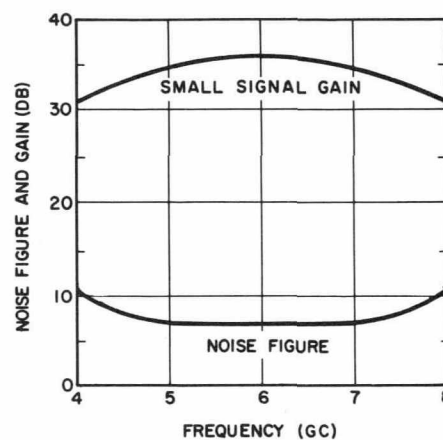
APPLICATIONS

radar
ecm
instrumentation
communications
radiometry

MECHANICAL & MISCELLANEOUS

VSWR,[†] max
Input 2.0
Output 2.0
Mounting Position Any
Weight, lb 2.3
Overall Length, in 9.3
Cooling Convection
RF Connectors Type TNC
Power Connection Flying Leads
Collector Connection Flying Lead

TYPICAL CHARACTERISTICS



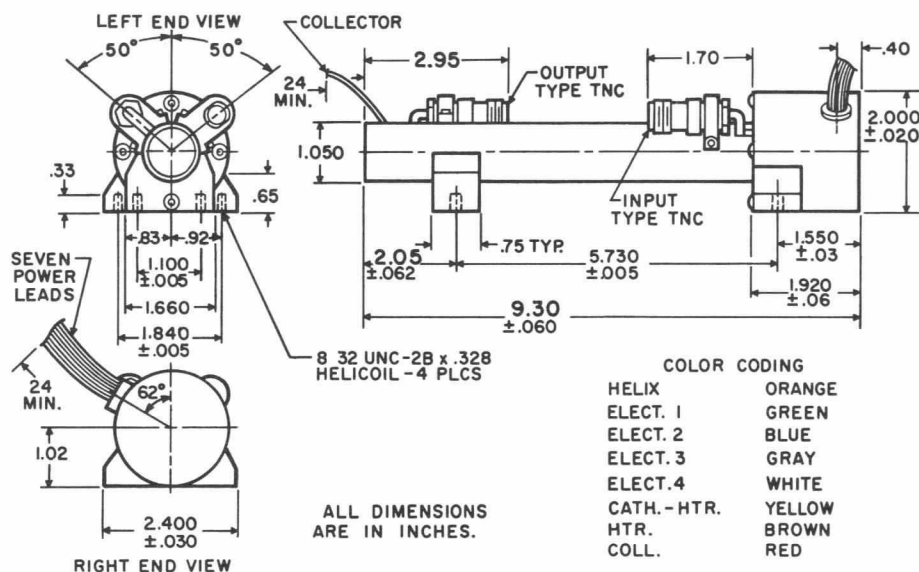
OPERATING CONDITIONS*

Htr, #	vac or vdc.....	6.3
Htr, amp (max.).....	0.35	
Elect. 1, vdc.....	-30 to 0	
Elect. 2, vdc.....	20 to 75	
Elect. 3, vdc.....	50 to 200	
Elect. 4, vdc.....	100 to 400	
Helix, vdc.....	600 to 700	
Helix, μ a (max.).....	100	
Collector, vdc.....	750 to 1000	
Beam, μ a (max.).....	1000	

ENVIRONMENTAL

Shock.....	50 G, 12 ms,	
(energized)	3 axes	
Vibration.....	15 G, 55 to	
(operating)	3000 cps	
Temp, Ambient	-55 C to	
(operating)	+85 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.
 - † Max. VSWR of ZM-3245 is 2.5.
 - # A 6-sec fast warmup heater is available at increased cost.
- These data are subject to change without notice.