

Traveling-Wave Tubes

Technical Information

RF PERFORMANCE

Tube Type	Frequency Range (Gc)	Min. CW Saturated Power Output (watts)	Minimum Small Signal Gain (db)	Maximum Noise Figure (db)
ZM-3173	7-11	10	30	30

- MEDIUM POWER
- X-BAND
- PPM FOCUSING

FEATURES

high gain
broad bandwidth
periodic permanent magnet focusing
metal-ceramic construction
military environments
light weight
air cooling
no anode power source required

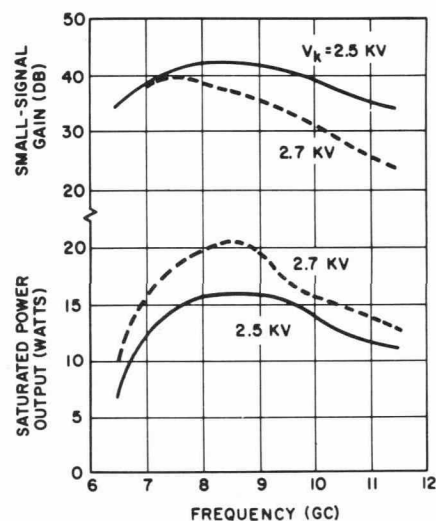
APPLICATIONS

radar
ecm
communications
instrumentation

MECHANICAL & MISCELLANEOUS

VSWR, max
Input..... 2.5
Output..... 2.5
Mounting position..... Any
Weight, lb. 2.1
Overall length, in. 8.55
Cooling..... Forced air
Flow, cfm#..... 30
Max. inlet air temp., °C ... 25
Min. air press. in ft (alt.)... 10,000
Connectors
RF input..... TNC, female
RF output..... TNC, female
DC..... Flying leads

TYPICAL CHARACTERISTICS



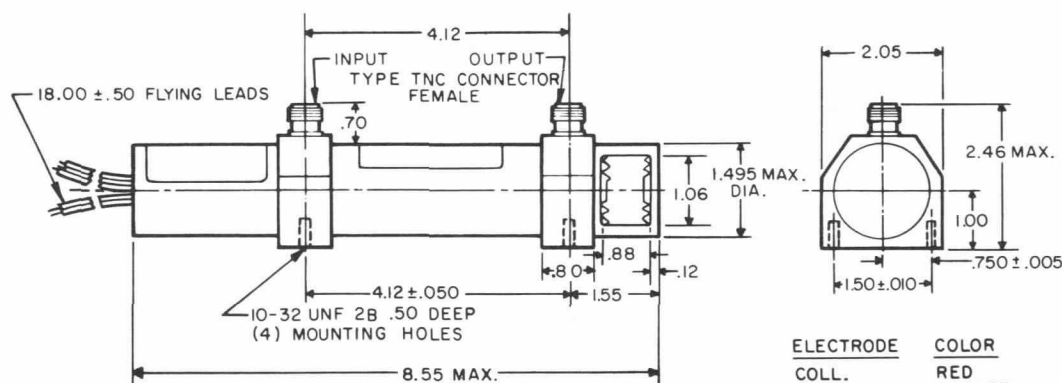
OPERATING CONDITIONS^{*†}

Htr. vac or vdc	6.0 to 7.5
Htr. amp (max)	0.75
Cath. kv dc, with resp. to helix..	-2.3 to -2.7
Cath. ma, (max)	55
Focus elect. vdc, with resp. to cathode	0 to -20
Coll. vdc, with resp. to helix ...	0
Helix ma (max.)	5

ENVIRONMENTAL

Shock.....	30 G, 11 ms, (energized) 3 axes
Vibration	10 G, 70-2000 cps, (operating) 3 axes
Temp., ambient....	-40 to +85°C (operating)
Altitude.....	100,000 ft (operating)
Acoustic noise.....	135 db, 25 to (operating) 12,000 cps

OUTLINE



DIMENSIONS ARE IN INCHES

ELECTRODE	COLOR
COLL.	RED
HELIX	ORANGE
FOCUS	GREEN
CATH.-HTR.	YELLOW
HTR.	BROWN

NOTES

- # Sufficient air must be supplied to this tube to hold the collector temperature below 150°C.
- * For the performance ratings specified, voltages should be adjusted to values specified by instructions accompanying each tube. These values will be within the ranges given above.
- † The helix is connected to the package which should be grounded in the normal installation of this tube.

These data are subject to change without notice.