

Traveling-Wave Tubes

Technical Information

- MEDIUM POWER
- C/X-BAND
- PPM FOCUSING

RF PERFORMANCE

Tube Type	Frequency Range (Gc)	Min. CW Saturated Power Output (watts)	Minimum Small Signal Gain# (db)	Maximum Noise Figure (db)
ZM-3273	5-10	10	60	30
ZM-3274	5-12	10	60	30
ZM-3275	5.4-11	10	60	30
ZM-3276	7-11	15	60	30
ZM-3277	7-12	10	60	30
ZM-3278	8-10	20	60	30
ZM-3279	8-12	10	60	30

FEATURES

high gain
broad bandwidth
periodic permanent magnet focusing
metal-ceramic construction
military environments
light weight
conduction cooling

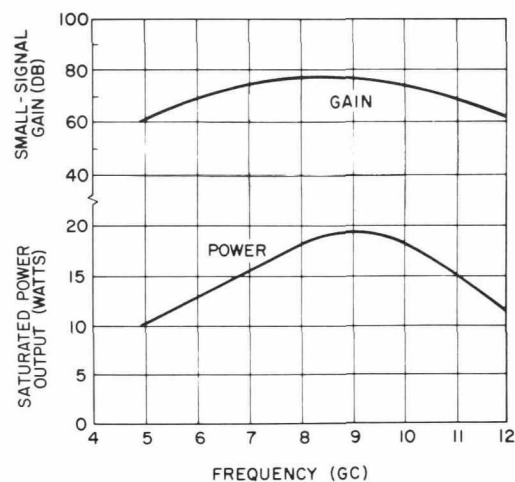
APPLICATIONS

radar
ecm
communications
instrumentation
augmentor

MECHANICAL & MISCELLANEOUS

VSWR, max	
Input.....	2.5
Output.....	2.5
Mounting position.....	Any
Weight, lb.	3
Overall length, in.	10.3
Cooling.....	Conduction from base.* (Air cooled versions are also available.)
Connectors	
RF input.....	N, female
RF output.....	N, female
DC	Flying leads

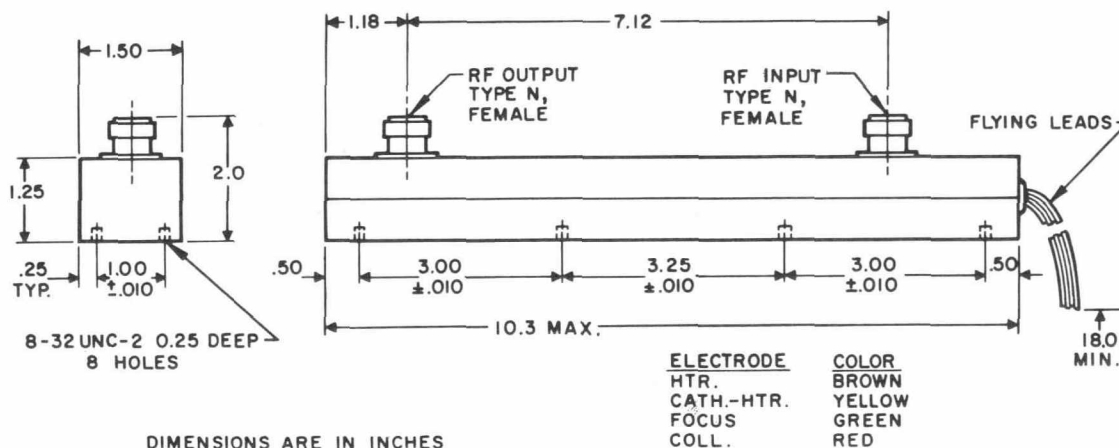
TYPICAL CHARACTERISTICS



OPERATING CONDITIONS^{† ‡}

Htr. vac or vdc 6.0 to 7.5
Htr. amp (max) 0.80
Cath. kv dc, with resp. to coll. ... -2.6 to -2.9
Cath. ma, (max) 65
Focus elect. vdc, with
resp. to cathode 0 to -30
Helix vdc, with resp. to coll. ... -100 to +100
Helix ma (max) 10

OUTLINE



NOTES

- # Lower gain versions of these tubes are available.
- * To assure adequate cooling these tubes must be securely mounted with maximum contact area to a good heat-conducting surface of sufficient heat capacity to hold the tube package 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 collector is connected to the package which should be grounded in the normal installation of this tube. The helix is connected to the center pins of the r-f input and output connectors. D-c power should be connected to the helix by use of a three-way, r-f and d-c connector at the r-f input or output, such as Microlab HU-90N (7-13 Gc) and HU-60N (4-8 Gc) or equivalent. (Connection of d-c to r-f input connector is preferred.)

These data are subject to change without notice.