

Traveling-Wave Tubes

Technical Information

ZM-3334
ZM-3335
ZM-3378

RF PERFORMANCE

Tube Type	Frequency Range (Gc)	Maximum Noise Figure (db)	Minimum SS Gain (db)	Minimum Saturation Power Output (mw)
ZM-3378	2.0-4.0	8	30	5
ZM-3334	2.2-2.3	5.5	30	5
ZM-3335	2.7-3.3	6	30	7

- LOW NOISE
- S-BAND
- SRPM FOCUSING

FEATURES

low noise
broad bandwidth
single-reversal permanent-magnet focusing*
metal-ceramic construction
military environments
lightweight
crystal mixer protection

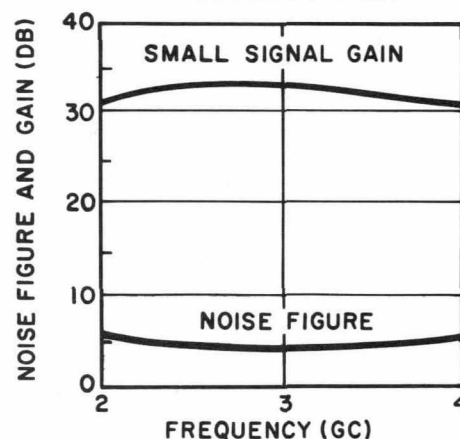
APPLICATIONS

radar
ecm
instrumentation
communications
radiometry

MECHANICAL & MISCELLANEOUS

VSWR (max.)	
Input	2.5
Output	2.5
Mounting Position	Any
Weight, lb	9.3
Overall Length, in.	13.84
Cooling	Convection
RF Connectors	Type N, female
DC Connector	Cannon KPT-02H12-10PN (or equiv.)

TYPICAL CHARACTERISTICS



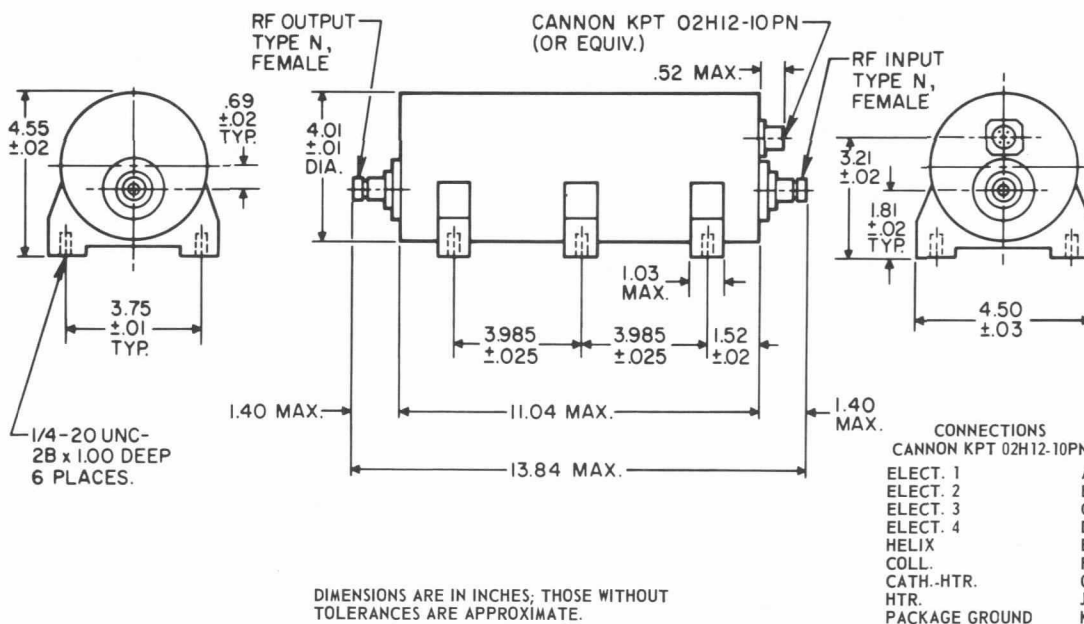
OPERATING CONDITIONS[†]

Htr, vac or vdc	6.3
Htr, amp (max.)	0.35
Elect. 1, vdc	-35 to 0
Elect. 2, vdc	25 to 75
Elect. 3, vdc	30 to 120
Elect. 4, vdc	100 to 300
Helix, vdc	250 to 300
Helix, μ a (max.)	100
Collector, vdc	550 to 600
Beam, μ a (max.)	1200

ENVIRONMENTAL

Shock	30 G, 11ms, (energized)	3 axes
Vibration	15 G, 90 to (operating)	2000 cps
Temp. Ambient	-65 to +71C # (operating)	
Altitude	100,000 ft (operating)	
Acoustic Noise	150 db, 25 to (operating)	12,000 cps

OUTLINE



NOTES

* Since these tubes are single-reversal permanent-magnet focused and magnetically shielded, they are well suited for applications requiring close physical spacing with other tubes or magnetic materials.

[†] 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.

This tube is capable of operating to +100 C with approximately 0.5 db degradation in noise figure.

These data are subject to change without notice.