ELECTRON TUBE DEPARTMENT ■ COMPONENTS DIVISION
INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION, CLIFTON, NEW JERSEY

X-354 TRAVELING WAVE TUBE

TENTATIVE

DESCRIPTION:

THE X-354 IS A SUPER-HIGH-FREQUENCY, MEDIUM-POWER TRAVELING WAVE AMPLIFIER TUBE EMPLOYING A HELICAL WAVE PROPAGATING STRUCTURE. THE TUBE IS DESIGNED FOR USE AS A CONTINUOUS WAVE AMPLIFIER IN THE FREQUENCY RANGE OF 8 TO 12 KILOMEGACYCLES PER SECOND. IT IS OF ALL-METAL SHELL CONSTRUCTION, AND TYPE TNC FEMALE COAXIAL LINE R-F CONNECTORS ARE PROVIDED AS AN INTEGRAL PART OF THE STRUCTURE. THE TUBE IS SELF-ALIGNING IN THE PERMANENT MAGNET WHICH PROVIDES THE MAGNETIC FIELD REQUIRED TO DEFINE THE PATH OF THE ELECTRON BEAM.

ELECTRICAL DATA:

HEATER, FOR OXIDE-COATED, UNIPOTENTIAL CATHODE		
VOLTAGE	6.3	VOLTS
CURRENT	2.0	AMPERES
FREQUENCY	8 TO 12	KMC
GAIN (SMALL SIGNAL) (NOTE 1)	33	DB
GAIN (AT RATED POWER OUT) (NOTE 1)	25	DB
POWER OUTPUT (NOTE 1)	5	WATTS

MECHANICAL DATA:

MOUNT		SPECIAL
MOUNTING POSITION		ANY
BASE		MOULDED RUBBER FLEXIBLE LEADS
OVERALL TUBE LENGTH	12	INCHES
R-F CIRCUIT CONNECTORS		TNC FEMALE
TYPE OF COOLING		AIR OR WATER COOLED COLLECTOR

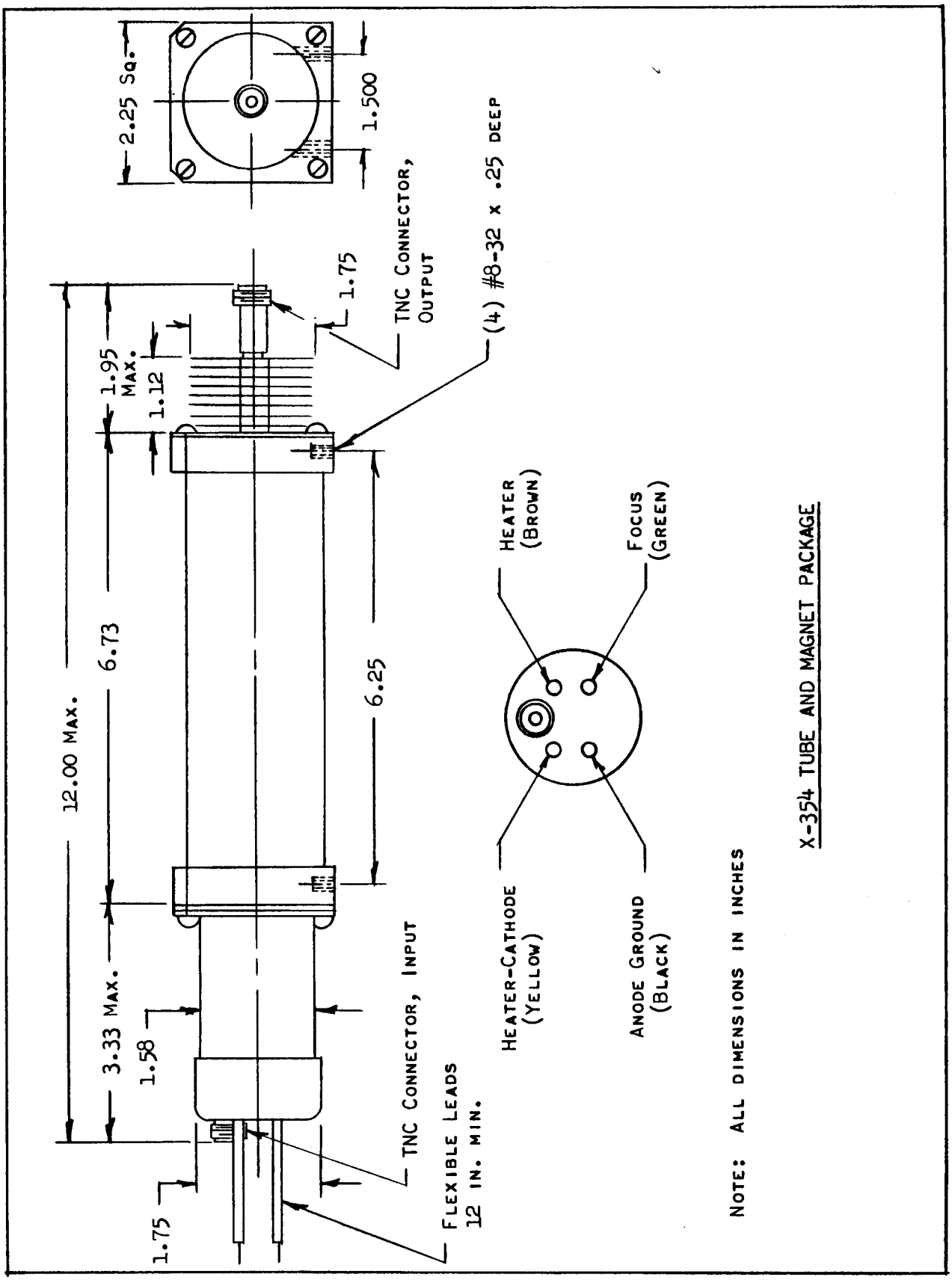
MAXIMUM RATINGS:

Helix Voltage with Respect to Ground (Externally)	0	Volts
Anode Voltage with Respect to Ground	0	Volts
Collector Voltage with Respect to Ground	0	Volts
Cathode Voltage with Respect to Ground	-4000	Volts
Cathode Current	60	ma
Collector Current	60	ma
Helix Current	5	ma
Focus Electrode Voltage with Respect to Cathode	-100	Volts
Beam Duty Cycle	100	Percent

Note 1: Minimum performance over the frequency band of 8 to 12 kmc with operating conditions optimized near the center of the band.

Additional information for specific applications can be obtained from the:

Electron Tube Applications Section
ITT Components Division
Post Office Box 7065
Roanoke, Virginia



X-354 TUBE AND MAGNET PACKAGE