



T E N T A T I V E

DESCRIPTION:

THE X-354C 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.

THE X-354C IS OF ALL-METAL SHELL CONSTRUCTION, AND TYPE TNC GRFF-184 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	1.5	AMPERES
FREQUENCY	8 TO 12	KMC
GAIN - SMALL SIGNAL (NOTE 1)	36	DB
GAIN - AT RATED POWER OUT (NOTE 1)	33	DB
POWER OUTPUT (NOTE 1)	2	WATTS

MECHANICAL DATA:

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

X-354C
TRAVELING
WAVE TUBE

- 2 -

MAXIMUM RATINGS:

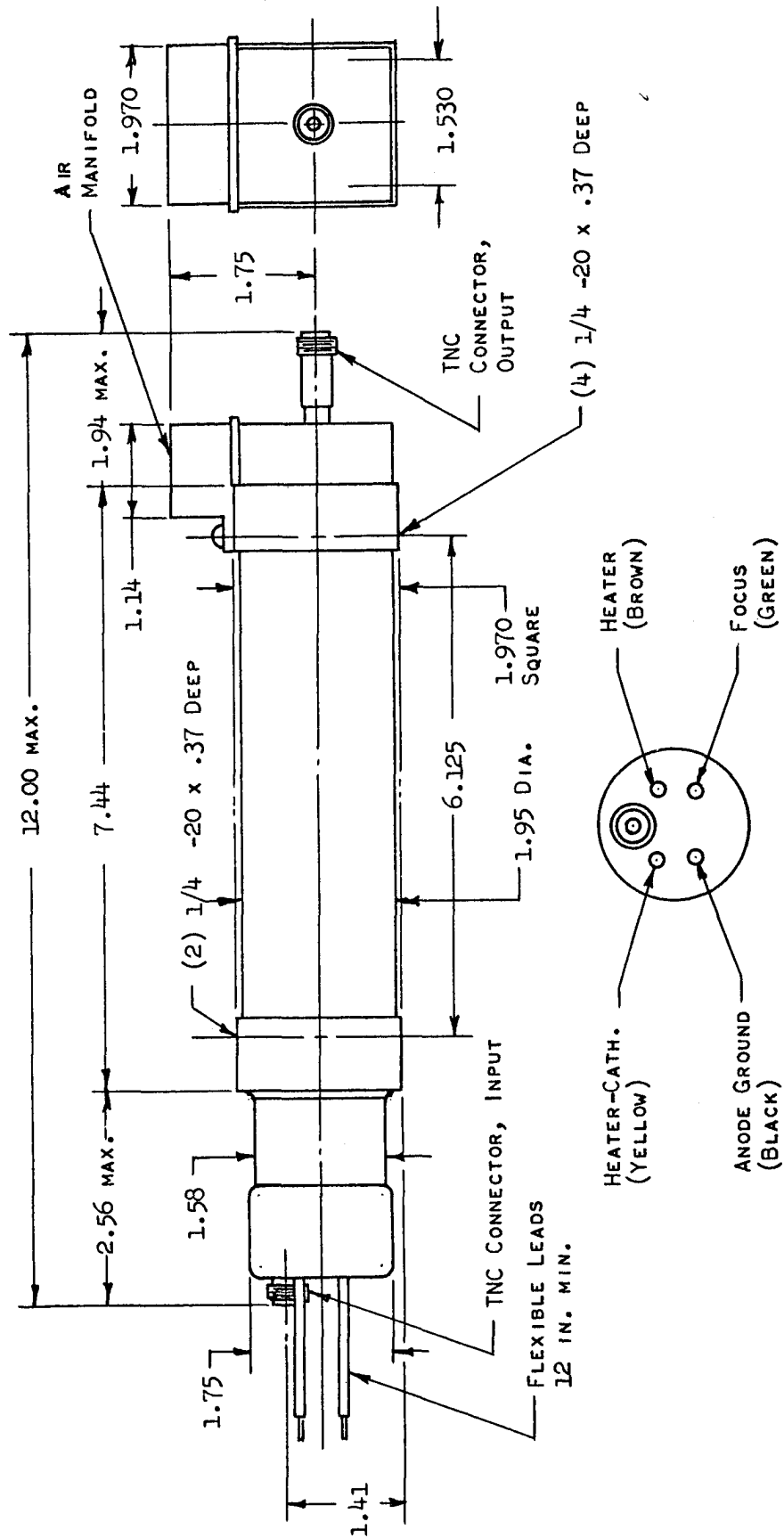
HELIX VOLTAGE WITH RESPECT TO GROUND (EXTERNALLY)	0	VOLTS
ANODE VOLTAGE WITH RESPECT TO GROUND	0	VOLTS
COLLECTOR VOLTAGE WITH RESPECT TO GROUND	0	VOLTS
CATHODE VOLTAGE WITH RESPECT TO GROUND	-3200	VOLTS
CATHODE CURRENT	38	MA
COLLECTOR CURRENT	38	MA
HELIX CURRENT	3.5	MA
GRID VOLTAGE WITH RESPECT TO CATHODE	-100	VOLTS
BEAM DUTY CYCLE	100	PER CENT

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 412
CLIFTON, NEW JERSEY



X-354C TUBE AND MAGNET PACKAGE



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