



T E N T A T I V E

CERAMIC HYDROGEN DIODE

DESCRIPTION:

THE KU-94 IS A CERAMIC ENVELOPE HYDROGEN FILLED DIODE. THIS TUBE IS DESIGNED FOR RECTIFIER AND PULSE TRANSFORMER BACKSWING DIODE CLIPPER APPLICATIONS. THE LOW TUBE VOLTAGE DROP AND WIDE RANGE OF AMBIENT OPERATING TEMPERATURES, IDEALLY SUIT THIS TUBE TO THE ENVIRONMENTS ENCOUNTERED IN MILITARY EQUIPMENT.

ELECTRICAL DATA, GENERAL:

	<u>NOM.</u>	<u>MIN.</u>	<u>MAX.</u>	
HEATER VOLTAGE	5.0	4.7	5.3	VOLTS AC
* HEATER CURRENT (AT 5.0 VOLTS)		18.0	28.0	AMPERES
HEATER (NOTE 1)				
RESERVOIR VOLTAGE (NOTE 2)		4.7	5.3	VOLTS
RESERVOIR CURRENT AT 5.0 VOLTS		5.0	20.0	AMPERES
MINIMUM HEATING TIME				5 MINUTES

MECHANICAL DATA, GENERAL:

MOUNTING POSITION
BASE (PER OUTLINE)
COOLING (NOTE 3)
NET WEIGHT
DIMENSIONS (SEE OUTLINE DRAWING)

VERTICAL ONLY, BASE DOWN

11.5 POUNDS

MAXIMUM RATINGS:

	<u>RECTIFIER</u>	<u>CLIPPER</u>	<u>BACK SWING DIODE</u>	
PEAK INVERSE ANODE VOLTAGE	26.0	0	33.0	KILOVOLTS
PEAK ANODE CURRENT	15.0	P	2000	AMPERES
AVERAGE ANODE CURRENT	4.5	E	3.0	AMPERES
R.M.S. ANODE CURRENT	-	N	60	AMPERES
ANODE VOLTAGE DROP	70	-	-	VOLTS
INITIAL FIRING VOLTAGE (NOTE 4)	100	-	-	VOLTS
RECURRENT FIRING VOLTAGE	60	-	-	VOLTS
AMBIENT TEMPERATURE	- 55	TO	125	DEGREES C

* INDICATES CHANGE FROM DATA SHEET DATED 6-61

NOTE 1:

CATHODE CONNECTED TO CENTER OF CATHODE HEATER.

NOTE 2:

THE OPTIMUM RESERVOIR VOLTAGE FOR RECTIFIER AND PULSE TRANSFORMER BACK SWING CLIPPER SERVICE IS 5.0 VOLTS. THIS MAY BE OBTAINED BY DIRECT CONNECTION TO THE CATHODE HEATER SUPPLY. FOR USE IN CERTAIN TYPES OF INVERSE CLIPPER SERVICE, A RESERVOIR VOLTAGE SOMEWHAT HIGHER OR LOWER MAY BE REQUIRED ($E_{RES} = 4.0 - 6.0$ VOLTS).

NOTE 3:

AIR BLAST COOLING (10 CFM) IS RECOMMENDED ABOUT THE BASE AND ANODE FOR OPERATION IN HIGH AMBIENT TEMPERATURES.

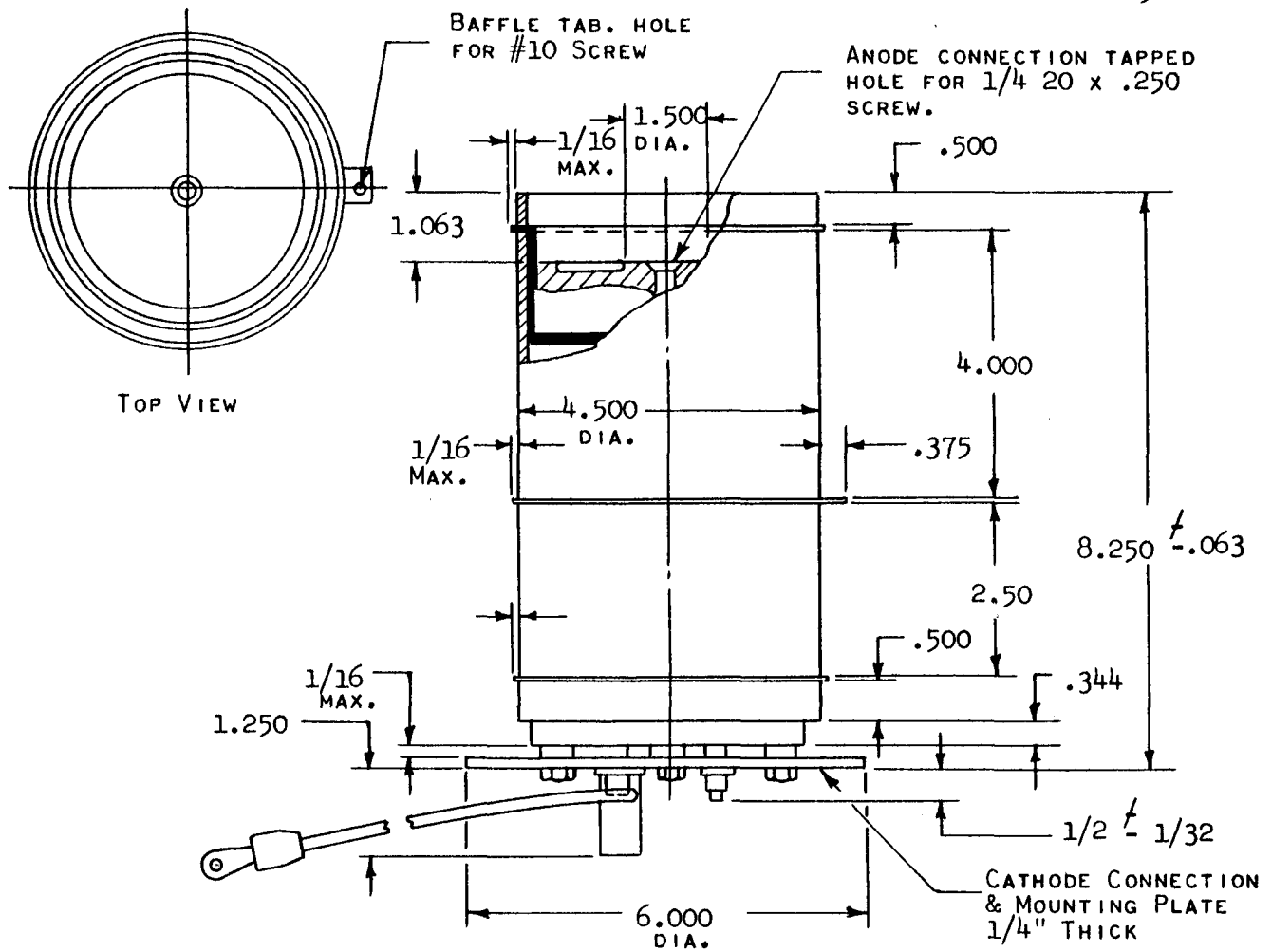
NOTE 4:

IT IS RECOMMENDED THAT THE BAFFLE BE LEFT FLOATING FOR RECTIFIER SERVICE. THE BAFFLE SHOULD BE CONNECTED TO THE CATHODE FOR CLIPPER SERVICE.

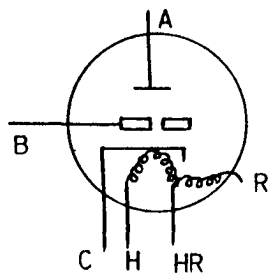
ADDITIONAL INFORMATION FOR SPECIFIC APPLICATIONS CAN BE OBTAINED FROM THE

ELECTRON TUBE APPLICATIONS SECTION
ITT COMPONENTS DIVISION
POST OFFICE BOX 412
CLIFTON, NEW JERSEY

KU-94



CATHODE HEATER LEAD
10" LONG, YELLOW LUG
FOR 1/4" SCREW



RESERVOIR LEAD
10" LONG, RED,
LUG FOR 1/4" SCREW

HEATER-RESERVOIR
LEAD 10" LONG, YEL-
LOW, BLACK SLEEVE
LUG FOR 1/4" SCREW.

(4) MTG. HOLES FOR 1/4" SCREW 90° SPACING ON 5.344 ± .020 DIA. CIRCLE

