

NUMERICAL INDICATOR**engineering data report****6844****(NIXIE*)(HB-106)**

The 6844 is a gas-filled, cold cathode, 10-digit ("0" through "9"), numerical indicator tube, having a common anode. It features a suppressor screen to minimize darkening of the viewing dome. It is intended for use as a direct, in-line, read-out device.

MECHANICAL (SEE FIG. 1)

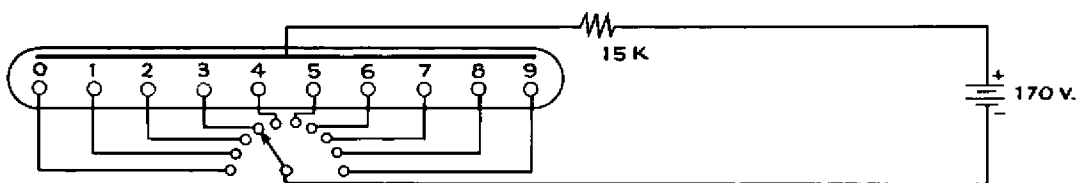
Overall length.....	1.380" Max.
Seated Height.....	1.125" Max.
Bulb Diameter.....	1.080" Max.
Envelope Connections.....	See Fig. 2
Height of Numerals.....	0.610" Nom.
Numeral Design (Human Engineering).....	See Fig. 3
Socket, 13-Pin (# HSK-106 or HSK-112).....	See Fig. 4, Note 4
Weight.....	1 oz. Max.
Mounting Position.....	See Note 1
Cathode(s).....	Glow Discharge
Shock.....	350 G's (30° Hammer)
Vibration.....	10 G's, 60 Cps.
Temperature.....	-65°C Through +70°C, Note 2
Altitude.....	70,000 Ft.

ELECTRICAL**1. ABSOLUTE RATINGS**

Ionization Voltage.....	170 Vdc Minimum
Anode Current	
Peak.....	4.0 MA, Note 3
Average.....	2.2 MA Max.
Individual Cathode Warrtage.....	0.38 Watts Max.

2. TEST CONDITIONS (See Typical Circuit)

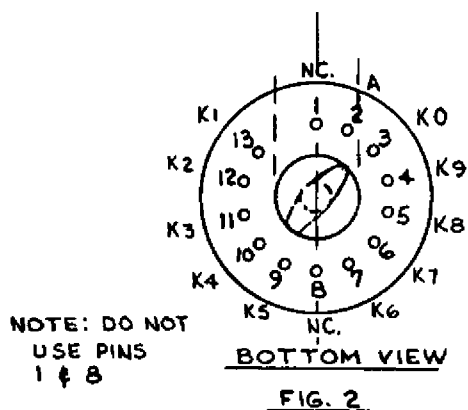
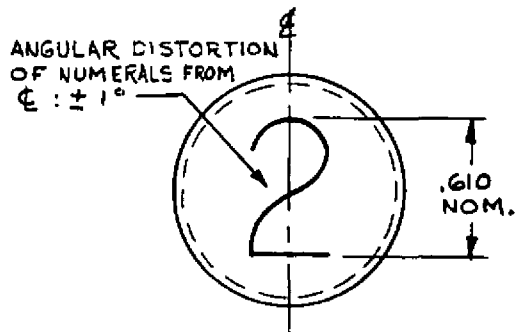
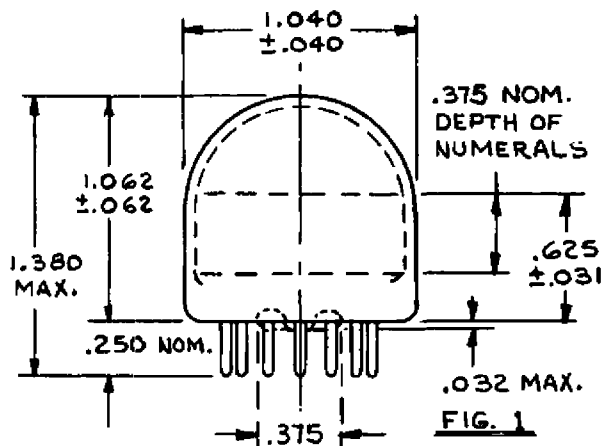
Anode Supply Voltage.....	170 Vdc
Anode Series Resistor.....	15K ohms
Anode Current.....	1.0 MA Min. - 2.2 MA Max.

TYPICAL CIRCUIT**NOTES**

1. The tube socket is oriented with respect to the viewing position so that A—A¹, intersecting the center of Pins 1 and 8 is vertical with Pin 8 on top. This orients the numerals in the correct vertical position. The numbers are viewed through the top of the tube.
2. From +30°C to +70°C, no significant change in cath-

ode current occurs. From +30°C to -65°C an increase in cathode current (Up to 50%) may be expected.

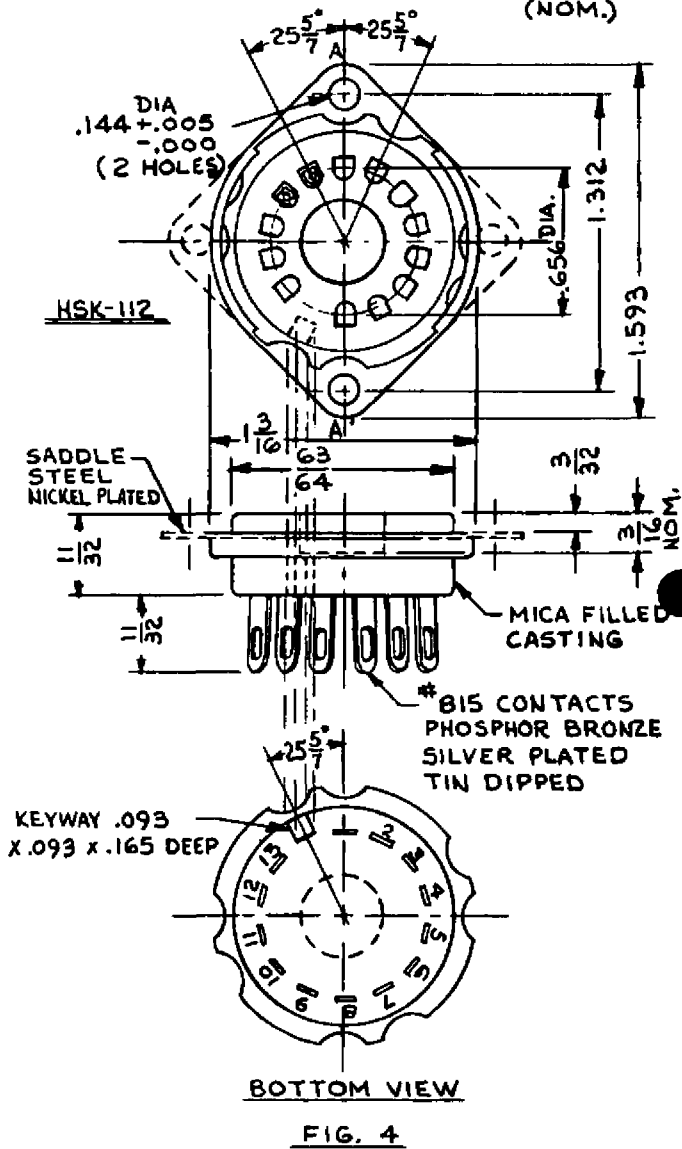
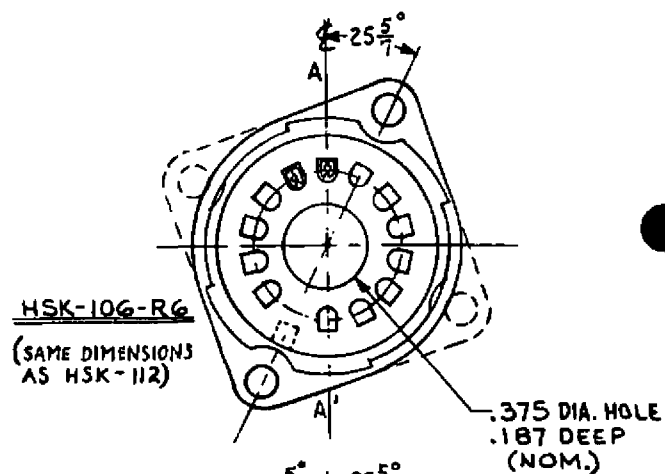
3. It is recommended that the cathode current be kept at its lowest possible value for complete numeral glow in order to obtain maximum life.
4. HSK-112 available early 1957.



1234567890

(REF. WADC TR 54-160 APPENDIX PAGE 102)

FIG. 3



Electronic Tube Division

BURROUGHS CORPORATION

Plainfield, New Jersey

AN APPLICATIONS ENGINEERING DEPARTMENT,
OFFERING ENGINEERING SERVICE AND CONSULTATION,
HAS BEEN SET UP TO ASSIST YOU IN TAKING FULL ADVANTAGE
OF THIS DEVICE. WRITE FOR FURTHER INFORMATION.