

GEC 7226A RUGGEDIZED VIDICON

TENTATIVE DATA

Type GEC 7226A is a ruggedized non-microphonic Vidicon intended primarily for live pick-up use in transistorized camera equipment where space is restricted and where heat dissipation must be kept at a minimum. The tube is constructed to withstand severe shock, vibration, and random white noise environments in any position without deterioration of the picture due to microphonics or dislocation of tube elements or loose particle damage to photo-conductive surface.

DATA**GENERAL:**

Operating Position	Any
Focusing Method	Magnetic
Deflection Method	Magnetic
Max. Useful Diagonal of Rectangular Image (4 x 3 Aspect Ratio)	0.625 in.
Orientation of Image... Horizontal Scan should be essentially parallel to a plane passing through tube axis and the short index pin.	

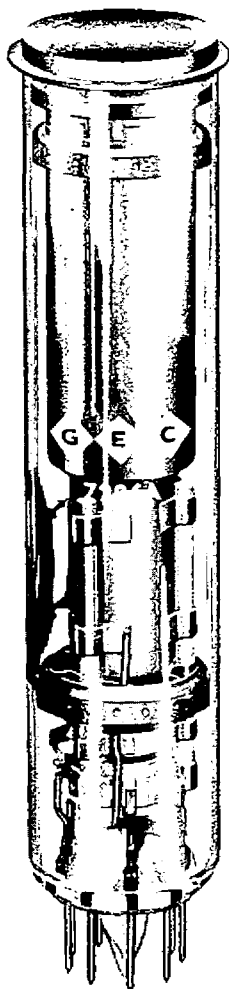
ELECTRICAL CHARACTERISTICS:

Heater (for Unipotential Cathode)	
Voltage (AC or DC)	6.3 V $\pm 10\%$
Current	0.15 A $\pm 10\%$
Direct Interelectrode Capacity (Signal Electrode to all other Electrodes)	3.1 uuf

ABSOLUTE MAXIMUM RATINGS:

Anode Voltage	350 V
Grid No. 2 Voltage	750 V
Grid No. 1 Voltage	
Negative Bias Values	125 V
Positive Bias Values	0 V
Heater - Cathode Peak Values	
Heater Negative with Respect to Cathode	125 V
Heater Positive with Respect to Cathode	10 V

from JETEC release #2302, Oct. 27, 1958



**ABSOLUTE MAXIMUM RATINGS, Continued:**

Faceplate	
Illumination	1000 ft-c
Temperature	71° C.
Signal Electrode Current	.60 uA

TYPICAL OPERATION:

Scanned Area	0.500 x 0.375"
Faceplate Temperature	30° to 35° C.
Optimum Signal-Output Current (Signal Electrode Current minus Dark Current) For uniform 2870° K Tungsten illumination on faceplate down to .5 ft-c	.2 uA
For uniform 2870° K Tungsten illumination on faceplate from .2 ft-c to .5 ft-c	.14 to .2 uA
Signal Electrode Voltage For 5 ft-c faceplate illumination and signal- output current of .2 uA	10 to 50 V
For .2 ft-c faceplate illumination and signal- output current of .14 uA	40 to 100 V
Average Gamma of Transfer Characteristic over Signal-Output Current operating range of .05 to .2 uA	.55
Anode Voltage	200 to 300 V
Grid No. 2 Voltage	300 V
Grid No. 1 Voltage (For picture cut-off with no blanking voltage on Grid No. 1)	-45 to -100 V
Minimum Peak-to-Peak Blanking Voltage When applied to Grid No. 1	30 V
When applied to Cathode	10 V
Magnetic Field Intensity at Center of Focusing Device	40 gauss
Magnetic Field Intensity of Adjustable Alignment Coil	0 to 4 gauss

ENVIRONMENTAL CONDITIONS:

Faceplate Temperature	71° C. Max.
Shock	(MIL-E-5272A, Para. 4.15.1, Procedure I)
Vibration	(MIL-E-5272A, Para. 4.7, Procedure I)

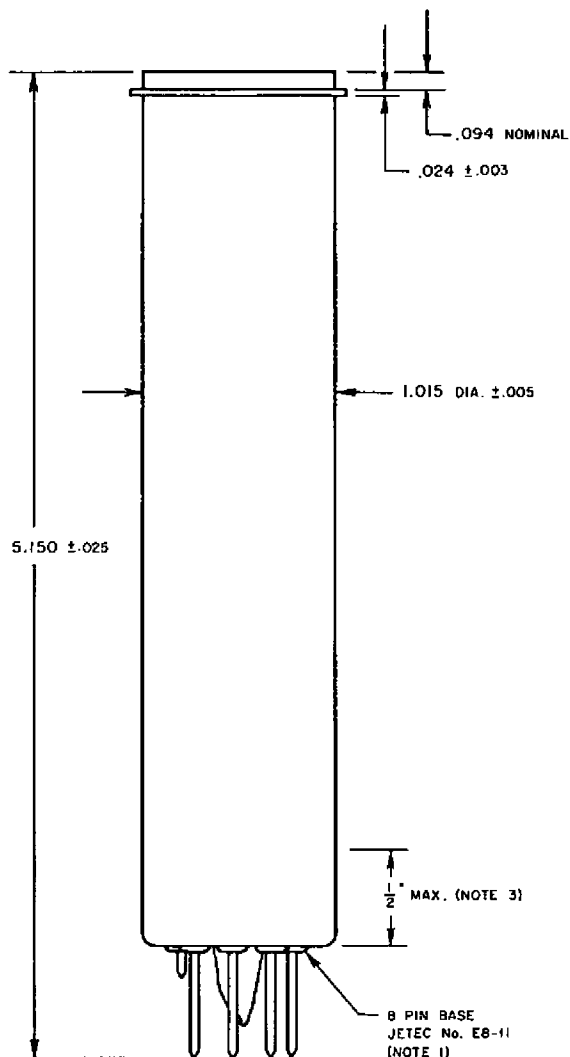
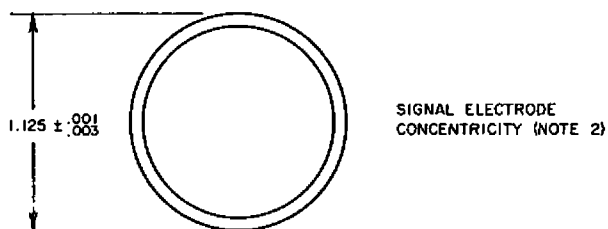


FIG. 1

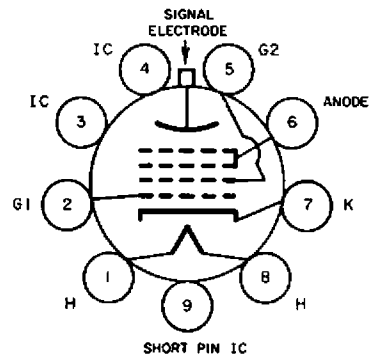
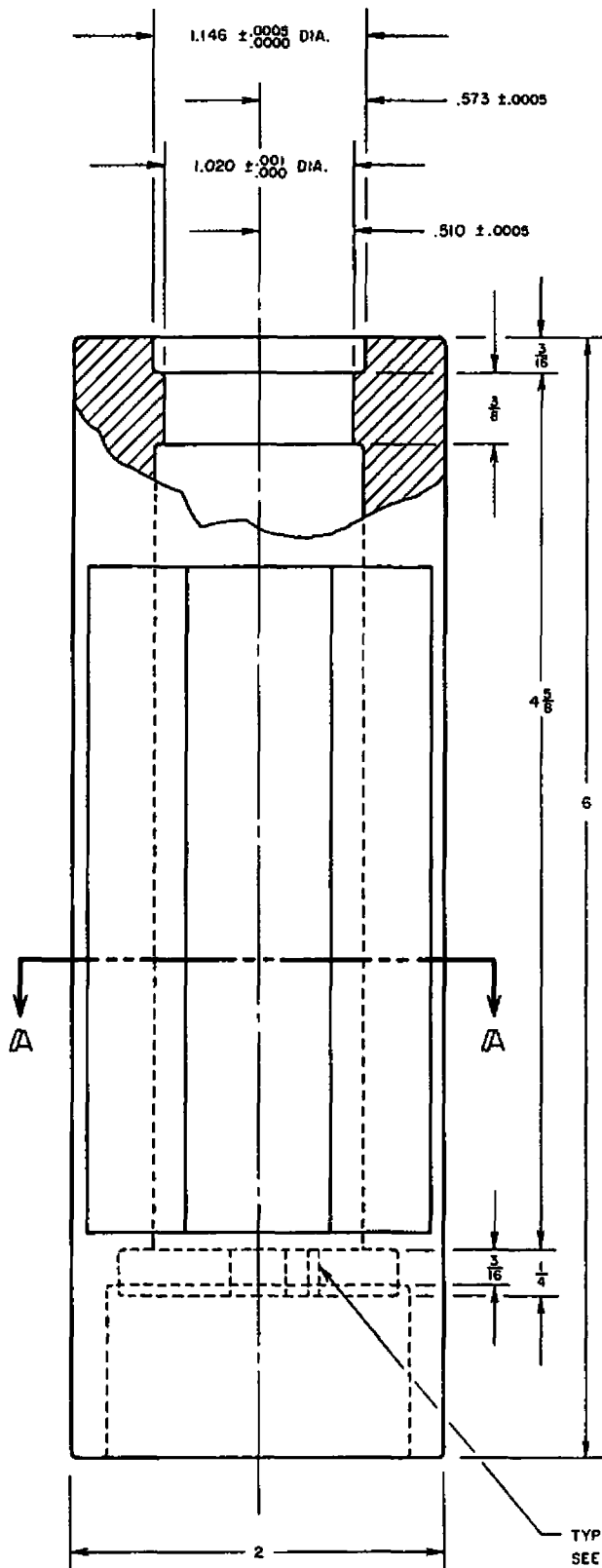


FIG. 2

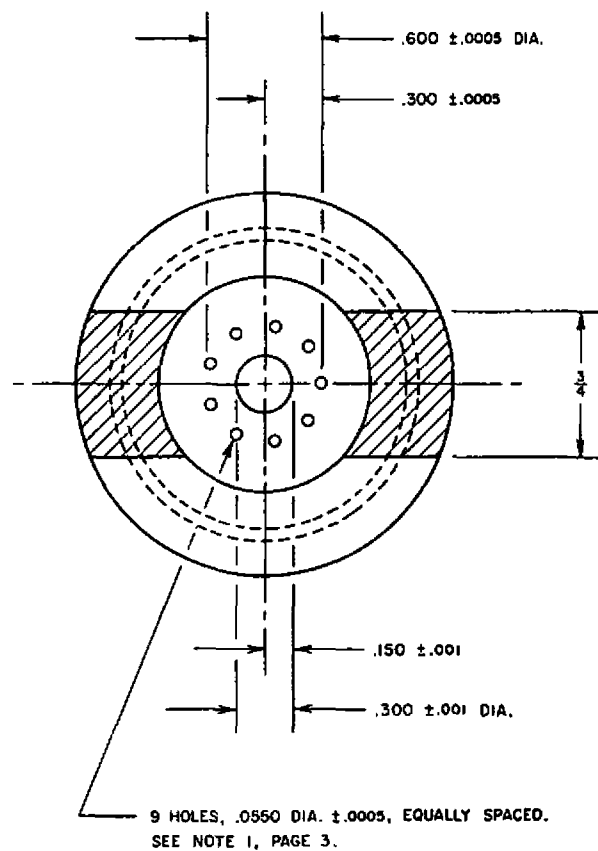
- PIN 1: HEATER
- PIN 2: GRID No. 1
- PIN 3: INTERNAL CONNECTION--DO NOT USE
- PIN 4: INTERNAL CONNECTION--DO NOT USE
- PIN 5: GRID No. 2
- PIN 6: ANODE
- PIN 7: CATHODE
- PIN 8: HEATER
- FLANGE: SIGNAL ELECTRODE
- SHORT INDEX PIN: INTERNAL CONNECTION--DO NOT USE

NOTES

1. Base-pin positions fit 0.25 inch thick, 10-hole flat-plate gage with holes located as follows: 9 holes, 0.0550 (±0.0005) inch diameter equally spaced, 0.2052 (±0.0005) inch apart on a circle, 0.6000 (±0.0005) inch diameter, plus a center hole, 0.300 (±0.001) in. diameter, concentric with 9-hole circle.
2. Signal electrode, bulb outside diameter, and base-pin circle concentricity tolerances are held to enable the tube to fit concentricity gage, Figure 3.
3. The 1/2" maximum length seal area will not exceed the bulb maximum diameter (1.020") but may be less than the bulb minimum diameter (1.010").
4. All dimensions are shown in inches.



SECTION A-A



CONCENTRICITY GAGE

FIG. 3