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 ±10%
  - Current: 0.15 A ±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 1)

Vibration (MIL-E-5272A,
  Para. 4.7,
  Procedure 1)
FIG. 1

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) inch 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.

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