Picture Tube

SHORT RECTANGULAR GLASS TYPE
LOW-VOLTAGE ELECTROSTATIC FOCUS
INTERNAL MAGNETIC SHIELD
With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:
Direct Interelectrode Capacitances:
- Cathode to all other electrodes... 3.65 pf
- Grid No.1 to all other electrodes... 4.15 pf
- External conductive coating to anode: (1400 max. pf
  900 min. pf
Heater Current at 2.68 volts...... 450 ± 45 ma
Heater Warm-Up Time (Average).... 11 seconds
Electron Gun.............. Type Requiring No Ion-Trap Magnet

Optical:
Phosphor (For curves, see front of this Section). P4—Sulfide Type,
Aluminized
Faceplate, Spherical........................ Filterglass
Light transmission (Approx.)............ 77%

Mechanical:
Weight (Approx.)........................... 10 lbs
Overall Length............................ 10-13/16" ± 3/16"
Neck Length............................... 3-11/16" ± 1/16"
Projected Area of Screen................ 155 sq. in.
External Conductive Coating:
Type........................................ Modified-Band
Contact area for grounding............. Near Reference Line

For Additional Information on Coatings and Dimensions:
See Picture-Tube Dimensional-Outlines and Bulb J192-1/2 A/B
sheets at front of this section
Cap. .................. Recessed Small Cavity (JEDEC No.J1-21)
Base .............. Small-Button Neoeightar 7-Pin, Arrangement 1,
(JEDEC No.B7-208)
Basing Designation for BOTTOM VIEW ... 8JK

Pin 1 - Heater
Pin 2 - Grid No.2
Pin 3 - Grid No.1
Pin 4 - Grid No.4
Pin 6 - Grid No.2
Pin 7 - Cathode
Pin 8 - Heater

Cap - Anode (Grid No.3,
  Grid No.5,
  Screen,
  Collector)
C - External
  Conductive
  Coating
Maximum and Minimum Ratings, Design-Maximum Values:

*Unless otherwise specified, voltage values are positive with respect to cathode*

**ANODE VOLTAGE**: 17600 max. volts

**GRID-No.4 (FOCUSING) VOLTAGE:**
- Positive value: 950 max. volts
- Negative value: 700 max. volts

**GRID-No.2 VOLTAGE**: 550 max. volts

**GRID-No.1 VOLTAGE:**
- Negative peak value: 400 max. volts
- Negative bias value: 155 max. volts
- Positive bias value: 0 max. volts
- Positive peak value: 2 max. volts

**HEATER VOLTAGE:**
- 2.9 max. volts
- 2.4 min. volts

**PEAK HEATER-CATHODE VOLTAGE:**
Heater negative with respect to cathode:
- During equipment warm-up period, not exceeding 15 seconds: 450 max. volts
- After equipment warm-up period: 200 max. volts

Heater positive with respect to cathode:
- Combined AC and DC voltage: 200 max. volts
- DC component: 100 max. volts

**Typical Operating Conditions for Grid-Drive Service:**

*Unless otherwise specified, voltage values are positive with respect to cathode*

**Anode Voltage**: 14000 volts

**Grid-No.4 Voltage**: 100 to 500 volts

**Grid-No.2 Voltage**: 300 volts

**Grid-No.1 Voltage for visual extinction of focused raster**: -35 to -72 volts

**Maximum Circuit Value:**
**Grid-No.1-Circuit Resistance**: 1.5 max. megohms

For X-radiation shielding considerations, see sheet

*X-RADIATION PRECAUTIONS FOR CATHODE-RAY TUBES*

at front of this Section