Picture Tube

RECTANGULAR GLASS TYPE
MAGNETIC FOCUS

ALUMINIZED SCREEN
70° MAGNETIC DEFLECTION

Electrical:

Direct Interelectrode Capacitances:
- Cathode to all other electrodes: 5 pf
- Grid No.1 to all other electrodes: 6 pf
- External conductive coating to anode: \(1500 \text{ max.} \) pf, \(750 \text{ min.} \) pf

Heater Current at 6.3 volts: 600 ± 60 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: Filterglass
Light transmission (Approx.): 74%

Mechanical:

Weight (Approx.): 19 lbs
Overall Length: 19-3/16" ± 3/8"
Neck Length: 7-1/2" ± 3/16"
Projected Area of Screen: 149 sq. in.
External Conductive Coating:
Type: Regular-Band
Contact area for grounding: Near Reference Line
For Additional Information on Coatings, Dimensions, and Deflection Angles:
See Picture-Tube Dimensional-Outlines and Bulb 'J133 C/E sheets at front of this section
Cap.: Recessed Small Cavity (JEDEC No.J1-21)
Base: Small-Shell Duodecal 5-Pin (JEDEC Group 4, No.85-57)
Basing Designation for BOTTOM VIEW: 12N

Pin 1—Heater
Pin 2—Grid No.1
Pin 10—Grid No.2
Pin 11—Cathode
Pin 12—Heater

ANODE

Cap—Anode
(Grid No.3, 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: 20000 max. volts
Grid-No.2 Voltage: 550 max. volts
Grid-No. 1 Voltage:

Negative peak value .................. 220 max. volts
Negative bias value ................... 155 max. volts
Positive bias value ................... 0 max. volts
Positive peak value ................... 2 max. volts
Heater Voltage ......................... 6.9 max. volts
.................................. 15.7 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.2 Voltage ...................... 300 volts
Grid-No.1 Voltage for visual extinction of focused raster .... -28 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