

Picture Tube

PAN-O-PLY — INTEGRAL IMPLOSION PROTECTION

(Provided by Formed Rim and Welded Tension Bands around Periphery of Tube Panel--- No Separate Safety-Glass or Integral Protective Window Required)

RECTANGULAR GLASS TYPE

ALUMINIZED SCREEN

LOW-VOLTAGE ELECTROSTATIC FOCUS

114° 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 max. 1000 min.	{ pf pf

Heater Current at 6.3 volts. 450 ± 20 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.) 49%

Mechanical:

Weight (Approx.) 15 lbs

Overall length 11.375" ± .250"

Neck length. 4.125" ± .125"

Projected Area of Screen 172 sq. in.

External Conductive Coating^a:

Type Regular-Band

Contact area for grounding Near Reference Line

For Additional Information on Coatings and Dimensions:

See *Picture-Tube Dimensional-Outlines* and *Bulb J149F1* 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 8HR

Pin 1—Heater

Pin 2—Grid No.1

Pin 3—Grid No.2

Pin 4—Grid No.4

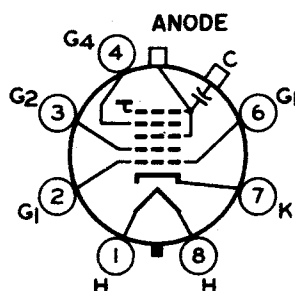
Pin 6—Grid No.1

Pin 7—Cathode

Pin 8—Heater

Cap—Anode (Grid No.3,
Grid No.5, Screen,
Collector)

C—External conductive
Coating



19DQP4

Maximum and Minimum Ratings, Design-Maximum Values:

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

Anode Voltage.	{23000 max. 11000 min.	volts volts
Grid-No.4 (Focusing) Voltage:		
Positive value	1100 max.	volts
Negative value	550 max.	volts
Grid-No.2 Voltage.	{550 max. 200 min.	volts 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. 5.7 min.	volts 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	300 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 Cathode-Drive Service:

Unless otherwise specified, voltage values are positive with respect to grid No.1

Anode Voltage.	16000	volts
Grid-No.4 Voltage ^b	200	volts
Grid-No.2 Voltage.	300	volts
Cathode Voltage for visual extinction of focused raster	28 to 62	volts
Field Strength of required adjustable Centering Magnet ^c	0 to 8	gauss

Maximum Circuit Value:

Grid-No.1 Circuit Resistance	1.5 max.	megohms
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^a External conductive coating and implosion protection hardware must be grounded.

^b The grid-No.4 voltage required for optimum focus of any individual tube will have a value anywhere between 0 and +400 volts with the combined grid-No.1 and video-signal voltage adjusted to give a 200-microampere anode current.



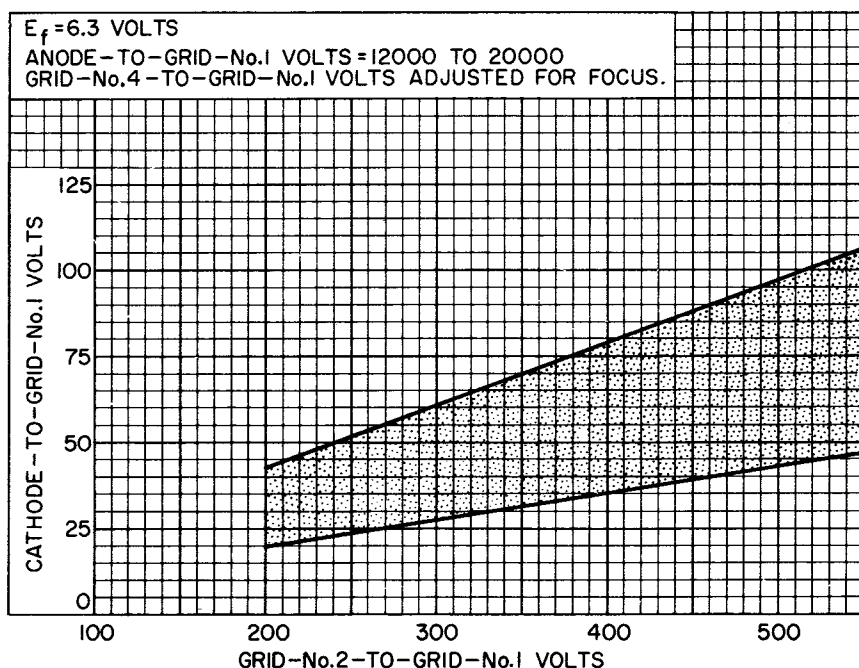
- c Distance from Reference Line for suitable PM centering magnet should not exceed 2-1/4 inches. The specified centering magnet compensates only for the effect which mechanical tube tolerances may have on the location of the undeflected, focused spot with respect to the center of the tube face. Maximum field strength of adjustable centering magnet equals

$$\sqrt{\frac{\text{Anode volts}}{16000 \text{ volts}}} \times 8 \text{ gauss}$$

The equipment manufacturer must determine and supply additional compensation for the effects of the earth's magnetic field and extraneous fields due to choice of circuitry and components. The additional compensation should preferably be applied as part of the magnetic field of the deflecting yoke.

For X-radiation shielding considerations, see sheet
X-RADIATION PRECAUTIONS FOR CATHODE-RAY TUBES
 at front of this Section

RASTER-CUTOFF-RANGE CHART Cathode-Drive Service



92CS-12008

