



5FP4-A

5FP4-A

VIEW-FINDER KINESCOPE

MAGNETIC FOCUS

MAGNETIC DEFLECTION

DATA

General:

Heater, for Unipotential Cathode:

Voltage. 6.3 ac or dc volts
 Current. 0.6 amp

Direct Interelectrode Capacitances:

Grid No.1 to All Other Electrodes. 8 μmf ←
 Cathode to All Other Electrodes. 5 μmf

Phosphor (For Curves, see front of this Section). P4—Sulfide Type

Fluorescence and Phosphorescence White

Persistence of Phosphorescence Short

Focusing Method. Magnetic

Deflection Method. Magnetic

Deflection Angle (Approx.) 53° Overall Length $11\text{--}1/8" \pm 3/8"$ Greatest Diameter of Bulb. $4\text{--}15/16" \pm 3/32"$ Min. Useful Screen Diameter. $4\text{--}1/4"$

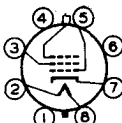
Mounting Position. Any

Cap. Recessed Small Ball (JETEC No. J1-22)

Base Long Medium-Shell Octal 8-Pin

BOTTOM VIEW

Pin 1—No
 Connection
 Pin 2—Heater
 Pin 3—Grid No.2
 Pin 4—No
 Connection



Pin 5—Grid No.1
 Pin 6—No
 Connection
 Pin 7—Cathode
 Pin 8—Heater
 Cap—Anode

Maximum Ratings, Design-Center Values:

ANODE VOLTAGE* 8000 max. volts

GRID—No.2 VOLTAGE. 410 max. volts

GRID—No.1 VOLTAGE:

Negative bias value. 125 max. volts

Positive bias value. 0 max. volts

Positive peak value. 2 max. volts

PEAK HEATER—CATHODE VOLTAGE:

Heater negative with respect to cathode. 150 max. volts

Heater positive with respect to cathode. 150 max. volts

Typical Operation:

Anode Voltage** 6000 volts

Grid—No.2 Voltage. 250 volts

Grid—No.1 Voltage for Visual Extinction
 of Undelected Focused Spot -25 to -70 volts

* The product of anode voltage and average anode current should be limited to 6 watts.

** Brilliance and definition decrease with decreasing anode voltage. In general, the anode voltage should not be less than 4000 volts.

← Indicates a change.

AUG. 1, 1951

TUBE DEPARTMENT
 RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

DATA

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→ Focusing-Coil Current (DC, approx.) . . . 120 ± 15% ma

Maximum Circuit Values:

Grid-No.1-Circuit Resistance. 1.5 max. megohms

- For specimen focusing coil similar to JETEC Focusing Coil No. 106 positioned with air gap toward kinescope screen, and center line of air gap $3\frac{1}{4}$ " from Reference Line (see Outline Drawing). The indicated current is for condition with combined grid-No.1 bias voltage and video-signal voltage adjusted to produce a highlight brightness of 10 foot-lamberts on a $3\frac{7}{8}$ " x $2\frac{7}{8}$ " picture area sharply focused at center of screen.

→ Indicates a change.

AUG. 1, 1951

TUBE DEPARTMENT

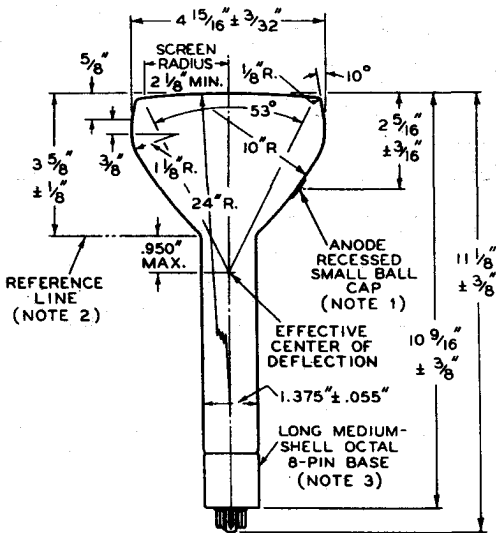
DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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SFP4-A

VIEW-FINDER KINESCOPE



NOTE 1: THE PLANE THROUGH THE TUBE AXIS AND PIN No. 5 MAY VARY FROM THE PLANE THROUGH THE TUBE AXIS AND ANODE TERMINAL BY AN ANGULAR TOLERANCE (MEASURED ABOUT THE TUBE AXIS) OF $\pm 10^\circ$. ANODE TERMINAL IS ON SAME SIDE OF TUBE AS PIN No. 5.

NOTE 2: REFERENCE LINE IS DETERMINED BY POSITION WHERE GAUGE 1.430" + .003" -.000" I.D. AND 2" LONG WILL REST ON BULB CONE.

NOTE 3: $\angle$ OF BULB WILL NOT DEVIATE MORE THAN 2° IN ANY DIRECTION FROM THE PERPENDICULAR ERECTED AT THE CENTER OF THE BOTTOM OF THE BASE.

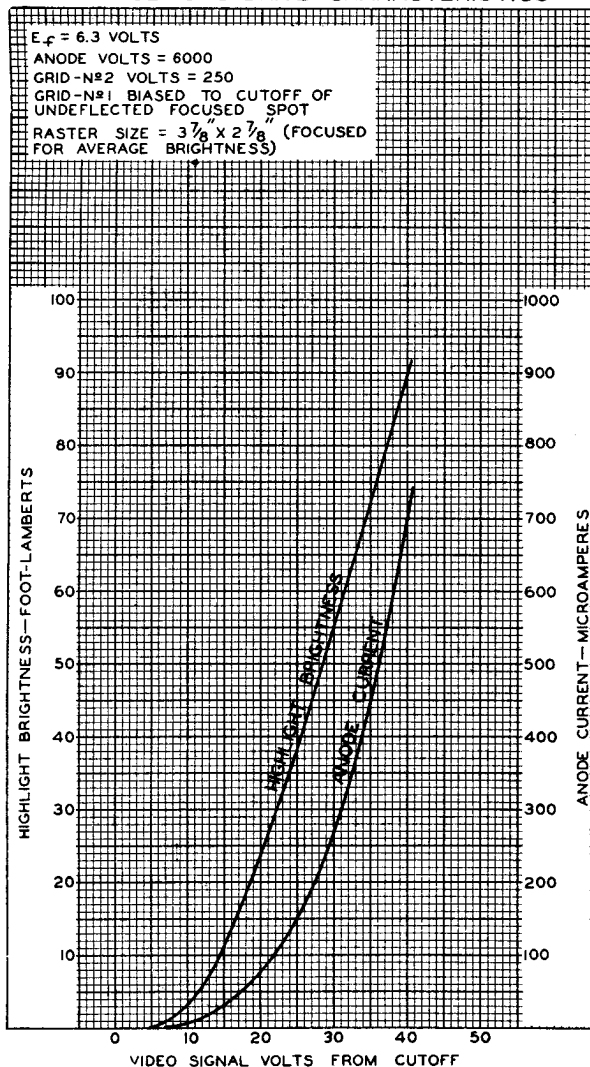
92CM-6362R4

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AVERAGE GRID-DRIVE CHARACTERISTICS



View-Finder Kinescope

MAGNETIC FOCUS

MAGNETIC DEFLECTION

GENERAL DATA

Electrical:

Direct Interelectrode Capacitances:

Cathode to all other electrodes.	8	pf
Grid No.1 to all other electrodes.	5	pf
Heater Current at 6.3 volts.	600	ma

Optical:

Phosphor (For Curves, see front of this section) .	P4—Sulfide Type
Fluorescence	White
Phosphorescence.	White
Persistence.	Short
Focusing Method.	Magnetic
Deflection Method.	Magnetic
Deflection Angle (Approx.)	53°

Mechanical:

Overall Length	11-1/8" $\pm$ 3/8"
Greatest Diameter.	4-15/16" $\pm$ 3/32"
Minimum Useful Screen Diameter	4-1/4"
Cap.	Recessed Small Ball (JEDEC No.J1-22)

Bases (Alternates):

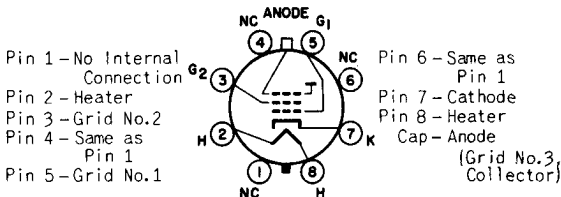
Long Medium-Shell Octal:

8-Pin (JEDEC Group 1, No.B8-65)

5-Pin (JEDEC Group 1, No.B5-80)

Medium-Shell Octal 8-Pin:

8-Pin (JEDEC Group 1, No.B8-11)



Maximum Ratings, Design-Center Values:

ANODE VOLTAGE ^a	8000 max.	volts
GRID—No.2 VOLTAGE	410 max.	volts
GRID—No.1 VOLTAGE:		
Negative bias value	125 max.	volts
Positive bias value	0 max.	volts
Positive peak value	2 max.	volts
PEAK HEATER—CATHODE VOLTAGE:		
Heater negative with respect to cathode	150 max.	volts
Heater positive with respect to cathode	150 max.	volts



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Typical Operation:

Anode Voltage ^b	6000	volts
Grid-No.2 Voltage	250	volts
Grid-No.1 Voltage for Visual Extinction of Undelected Focused Spot	-25 to -70	volts
Focused-Coil Current (DC, approx.) ^c	120 ± 15%	ma

Maximum Circuit Values:

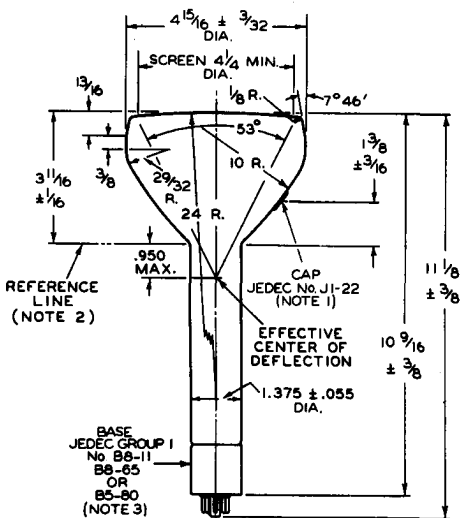
Grid-No.1-Circuit Resistance. 1.5 max. megohms

^a The product of anode voltage and average anode current should be limited to 6 watts.

^b Brilliance and definition decrease with decreasing anode voltage. In general, the anode voltage should not be less than 4000 volts.

^c For specimen focusing coil similar to JEDEC Focusing Coil No.106 positioned with air gap toward kinescope screen, and center line of air gap 3-1/4" from Reference Line (see Outline Drawing). The indicated current is for condition with combined grid-No.1 bias voltage and video-signal voltage adjusted to produce a highlight brightness of 10 foot-lamberts on a 3-7/8" x 2-7/8" picture area sharply focused at center of screen.





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DIMENSIONS IN INCHES

NOTE 1: THE PLANE THROUGH THE TUBE AXIS AND PIN 5 MAY VARY FROM THE PLANE THROUGH THE TUBE AXIS AND ANODE TERMINAL BY AN ANGULAR TOLERANCE (MEASURED ABOUT THE TUBE AXIS) OF 10°. ANODE TERMINAL IS ON SAME SIDE OF TUBE AS PIN 5.

NOTE 2: REFERENCE LINE IS DETERMINED BY POSITION WHERE GAUGE 1.430" +.003" -.000" INSIDE DIAMETER AND 2" LONG WILL REST ON BULB CONE.

NOTE 3: CENTER LINE OF BULB WILL NOT DEVIATE MORE THAN 2° IN ANY DIRECTION FROM THE PERPENDICULAR ERECTED AT THE CENTER OF THE BOTTOM OF THE BASE.

AVERAGE GRID-DRIVE CHARACTERISTICS

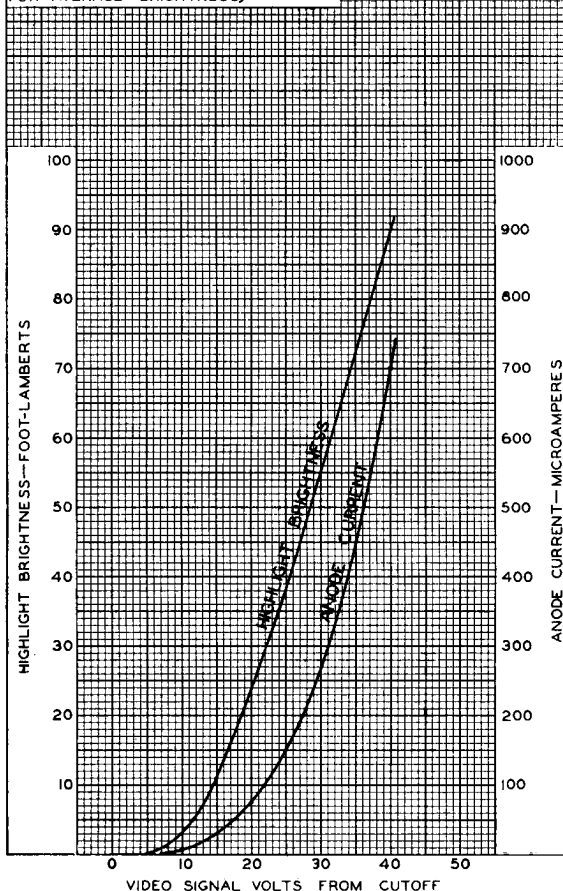
$E_f = 6.3$ VOLTS

ANODE VOLTS = 6000

GRID-N₂ VOLTS = 250

GRID-N₁ BIASED TO CUTOFF OF UNDEFLECTED FOCUSED SPOT

RASTER SIZE = $3\frac{7}{8} \times 2\frac{7}{8}$ " (FOCUSED FOR AVERAGE BRIGHTNESS)



92CM - 6683RI

