

# engineering data service

SYLVANIA 10KP7\* 10KP7A 10KP7B

### **CHARACTERISTICS**

GENERAL DATA			
Focusing Method		Magnetic	
Deflecting Method		_	D
Deflection Angle (Approx.)	10 <b>KP</b> 7	50	Degrees
Types*	10KP7A	10KP7B	
Fluorescence	Blue-White	Blue-White	
Phosphorescence	Yellow	Yellow	
Persistence	Long	Long	
Screen		Aluminized	
Faceplate	Gray Filter	Gray Filter	
•	Glass	Glass	
Light Transmittance			
(approx.)	77	77	
*In addition to the types shown, the other screen phosphors.	ne 10KP- can be	e supplied with several	
ELECTRICAL DATA			
Heater Voltage		6.3	Volts
Heater Current			Ampere
Direct Interelectrode Capacita			•
Cathode to All Other Elec			μμf
Grid No. 1 to All Other 1			, , μμf
			, ,

### MECHANICAL DATA

Minimum Useful Screen Diameter	0 Inches
Minimum Oscial Defects Diameter	/ Inches
Bulb Contact (Recessed Small Cavity Cap)	J1-21
Bulb	J84C or J84D
Base (Small-Shell Duodecal 5-Pin)	B5-57
Basing	12D
Bulb Contact Aligns with Vacant Pin	
Position No. 3	±10 Degrees
Weight (approx.)	9 Pounds

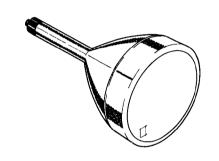
### **RATINGS**

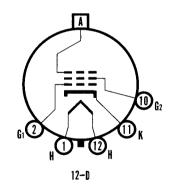
### MAXIMUM RATINGS (Absolute Maximum Values)

Anode Voltage							
10KP7, 10KP7A						11,000 Volts	dc
10 <b>KP</b> 7B						13,200 Volts	dc
Grid No. 2 Voltage						770 Volts	de

### QUICK REFERENCE DATA

10" Direct Viewed
Round Glass Type
Spherical, Gray Faceplate
10KP7B, Aluminized Screen
Magnetic Deflection
Magnetic Focus
10KP7A and 10KP7B, High
Resolution





# SYLVANIA ELECTRONIC TUBES

A Division of Sylvania Electric Products Inc.

## PICTURE TUBE OPERATIONS SENECA FALLS, NEW YORK

Prepared and Released By The TECHNICAL PUBLICATIONS SECTION EMPORIUM, PENNSYLVANIA

MARCH, 1960

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File Under

SPECIAL AND GENERAL PURPOSE CATHODE RAY TUBES

### SYLVANIA 10KP7\* 10KP7A 10KP7B PAGE 2

Diec Walne															200	Volts	dc
																	dc
															_		
•								10 <b>F</b>	<b>CP</b> 7		10	0 <b>K</b> ]	P7.A	<b>L</b>	10 <b>KP</b>	7 <b>B</b>	
•	-			•		٠	•	1	40			20	00			Volts	
															450	Volts	
															200	Volts	
							140			200			200	Volts			
RATING C	ONDIT	ION	S														
.1															9000	Volts	dc
															250	Volts	dc
•														-27	to -63	Volts	dc
															± 15%	Ma	dc
																	Max.
	Bias Value Peak Value Cathode Voltage egative with Reing Warm-up P 15 Seconds or Equipment Wositive with Res ERATING Control Itage Current (Appro	Bias Value Peak Value Cathode Voltage  egative with Respect to Cating Warm-up Period not to 15 Seconds Trequipment Warm-up Fositive with Respect to Cating CONDIT  ERATING CONDIT  Lating Condition of the Cating Contract (Approx.) 3	Bias Value Peak Value	Bias Value Peak Value	Bias Value Peak Value	Bias Value  Peak Value  Cathode Voltage  Regative with Respect to Cathode  Regative with Respect to Cathode  Regative with Respect to Exceed  Regative with Respect to Exceed  Regative with Respect to Cathode  REATING CONDITIONS  Regative with Respect to Cathode  REATING CONDITIONS	Bias Value Peak Value	Bias Value Peak Value	Bias Value Peak Value Sathode Voltage  ION  Egative with Respect to Cathode Segative with Respect to Exceed Seconds Se	Bias Value Peak Value  10KP7  Regative with Respect to Cathode Pegative with Respect to Cathode Period Note of Exceed  15 Seconds Period Period Period Period Positive with Respect to Cathode  140  ERATING CONDITIONS Period	Bias Value Peak Value  10KP7  140  140  15 Seconds Period not to Exceed Period	Bias Value Peak Value Peak Value Peak Value Peak Value Peak Value Peak Value  10KP7  10  140  15 Seconds Period not to Exceed Period Period Positive with Respect to Cathode  140  ERATING CONDITIONS Period Period Period Period Positive With Respect to Cathode  140  ERATING CONDITIONS Period Perio	Bias Value Peak Value  10KP7  10KP	Bias Value Peak Value	Bias Value Peak Value  10KP7  10KP7A  140  200  Ing Warm-up Period not to Exceed Period Peri	Sias Value	Bias Value

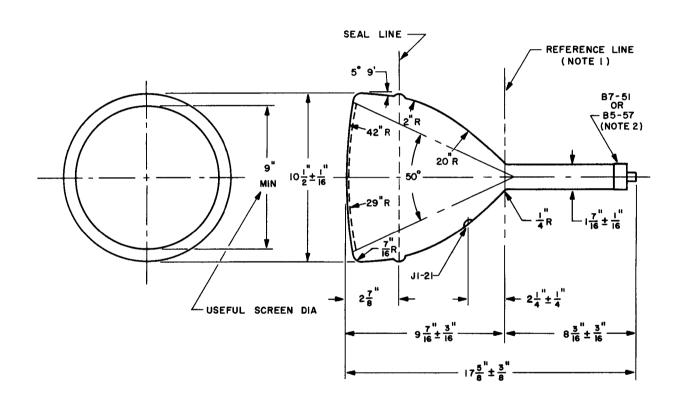
#### NOTES:

- 1. Brilliance and definition decrease with decreasing Anode Voltage. In general, the Anode Voltage should not be less than 7000 volts for Type 10KP7B and not less than 5000 volts for Types 10KP7 and 10KP7A.
- 2. Visual extinction of focused spot.
- 3. For JEDEC focusing coil 106 or equivalent, center of air gap 31/4 inches from Reference Line at an anode current of 200 µa.
- 4. Measured in accordance with MIL-E-1, at an anode current of 200 μa.

### **WARNING:**

X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range if this tube is operated at higher than the manufacturer's Maximum Rated Anode Voltage or 16,000 volts, whichever is less.

### **OUTLINE**



\$58059

#### **DIAGRAM NOTES:**

- 1. Reference line is determined by the plane of the upper edge of the reference line gauge (JEDEC No. 112) when the gauge is seated on the cone.
- 2. Anode terminal aligns with Pin Position No.  $3 \pm 10$  degrees and is on same side of bulb as Pin Position No. 3.