Rel 301

GOVERNMENT RESTRICTED 12DP7

TENTATIVE CHARACTERISTICS AND RATINGS

HEATER VOLTAGE (A.C. or D.C.)	6.3	Volts
HEATER CURRENT	0.6	Ampere
FOCUSING METHOD	Magnetic	
DEFLECTION METHOD	Magnetic	
MAXIMUM SOLID DEFLECTION ANGLE	55	Degrees
PHOSPHOR	No. 7	
DIRECT INTERELECTRODE CAPACITANCES (Approx.):		
Grid No. 1 to All Other Electrodes	10	μμf
Cathode to All Other Electrodes	8.5	μμf
OVERALL LENGTH	20-3/4" ±3/8"	-1-5/8"
GREATEST DIAMETER of BULB	12 ±3/16"	
MINIMUM USEFUL SCREEN DIAMETER	10"	
BULB SIDE TERMINAL	Large Cap	
BASE	Wafer Octal 8-Pin, Sleeve	
RMA BASING DESIGNATION	5AN	
DEFLECTION YOKE:		
Position	End Flush with Bulb-Neck Reference Line (see OUTLINE DRAWING)	
Length of Field	2" max.	

MAXIMUM RATINGS and TYPICAL OPERATING CONDITIONS
Maximum Ratings Are Absolute Values

ANODE (High-Voltage Electrode) VOLTAGE		7700 max.	Volts
GRID No. 2 (Accelerating Electrode) VOLTAGE		330 max.	Volts
GRID No. 1 (Control Electrode) VOLTAGE		Never positive	
D-C HEATER-CATHODE POTENTIAL*		125 max.	Volts
GRID No. 1-CIRCUIT RESISTANCE		1.5 max.	Megohms
TYPICAL OPERATION:			
Anode Voltage**	4000	7000	Volts
Grid No. 2 Voltage	250	250	Volts
Grid No. 1 for Visual Cut-Off#	-50	-50	Volts
Values subject to variation of	±50	±50	Per cent

* With heater negative. Cathode should be returned to one side or to the mid-tap of the heater transformer winding.

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

\# For visual extinction of stationary focused spot.

BASING

The bulb side terminal for the anode is on the same side of the tube as base pin No. 5. Its center will not deviate more than 10° from the plane through the axis of the tube and pin No. 5.

SPOT POSITION

The center of the undeflected unfocused spot will fall within a circle of 25-mm radius concentric with the tube face.

Suitable test conditions are: anode voltage, 4000 volts; spot unfocused; the tube shielded from all extraneous fields. To avoid damage to the tube, make the test with grid No. 1 voltage near cut-off.

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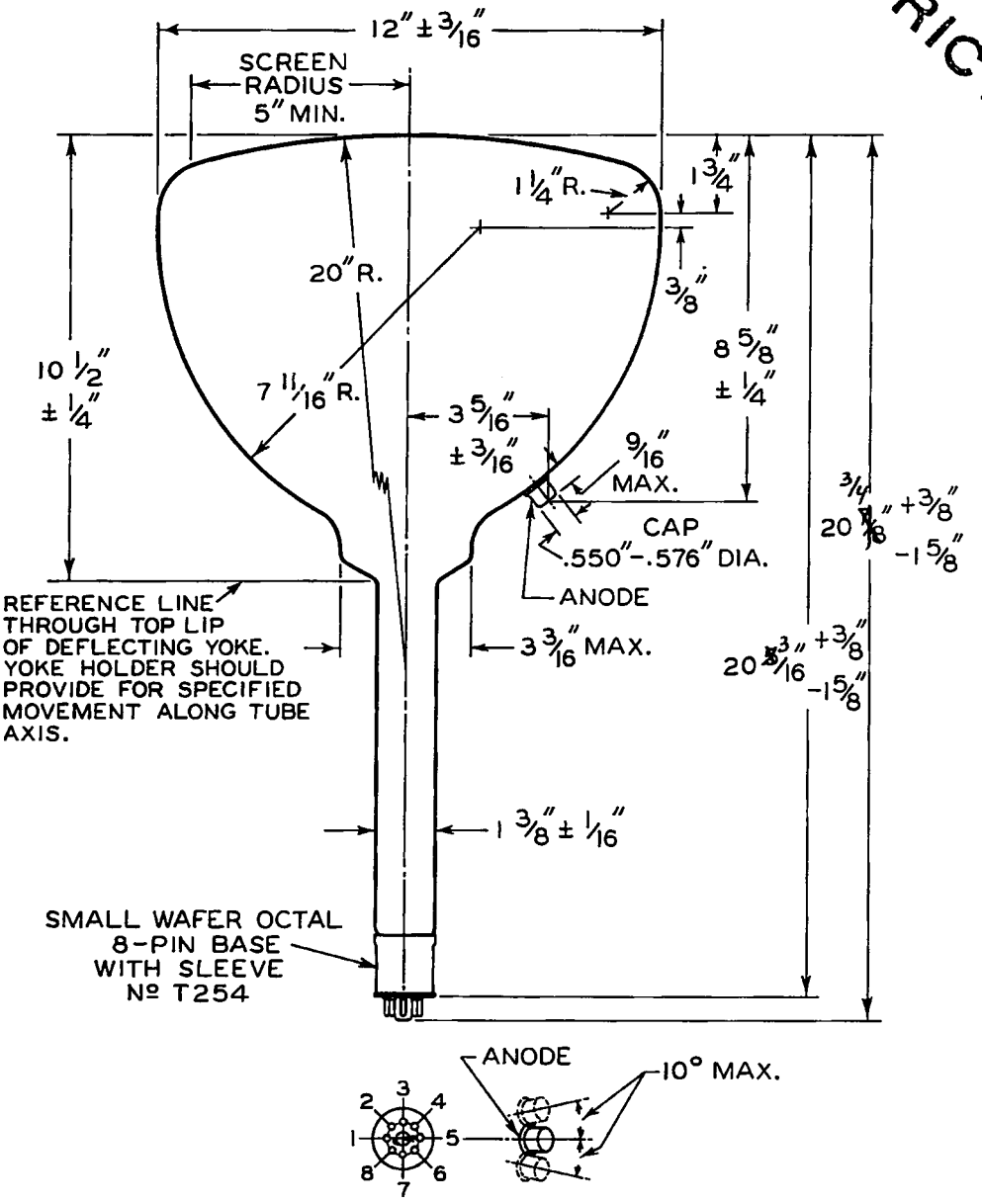
ANODE CURRENT vs GRID No. 1 VOLTAGE CHARACTERISTIC

Anode Voltage.....4000 to 7000 volts
Grid No. 2 Voltage.....250 volts

Anode Current, Microamperes	Grid No. 1 Voltage
0	-50
250	-16
500	-8
750	-3.6
1000	0



BOTTOM VIEW OF TUBE

MAR. 9, 1942

92C-6375