



Excellence in Electronics

The CK1353P- is a 16 inch electrostatic focus, magnetic deflection, filtered glass faceplate, metal shell type cathode ray tube with a long persistence screen suitable for radar applications. The addition of a final "A" designates a metalized screen.

TYPE
CK1353P-
CK1353P-A

MECHANICAL DATA

BASE : Small Shell Duodecal 7-Pin

TERMINAL CONNECTIONS :

Pin 1 Heater	Pin 10 Grid #2
Pin 2 Grid #1	Pin 11 Cathode
Pin 6 Focus	Pin 12 Heater
Pin 7 No Connection	Cap Collector

ELECTRICAL DATA

GENERAL CHARACTERISTICS :

Phosphor	#7
Fluorescence	Blue
Persistence	Short
Phosphorescence	Greenish - Yellow
Persistence	Long
Focusing Method	Electrostatic
Deflecting Method	Magnetic
Deflection Angle (approx.)	53°

HEATER CHARACTERISTICS :

Heater Voltage	6.3 volts
Heater Current	0.6 ± 10% amps.
Peak Heater - Cathode Voltage :	
Heater Negative with Respect to Cathode	125 volts DC
Heater Positive with Respect to Cathode	125 volts DC

DIRECT INTERELECTRODE CAPACITANCES : (μmfd) (approx.)

Grid #1 to All Other Electrodes	9.0
Cathode to All Other Electrodes	7.0

DESIGN CENTER MAXIMUM RATINGS :

Collector Voltage	15,000 volts DC
Grid #2 Voltage	700 volts DC
Grid #1 Voltage :	
Negative - Bias Value	180 volts DC
Positive - Bias Value	0 volts DC
Positive - Peak Value	2 volts DC
Peak Grid #1 Drive from Cutoff	65 volts DC
Focus Electrode Voltage	-500 to +1000 volts DC

CHARACTERISTICS AND TYPICAL OPERATION :

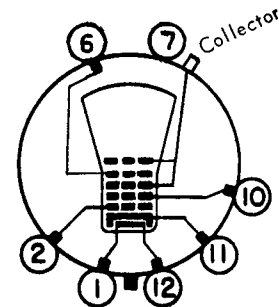
Collector Voltage	12,000 volts DC
Grid #2 Voltage	300 volts DC
Grid #1 Voltage ●	-35 to -75 volts DC
Grid #2 Current	-15 to +15 μa
Focusing Voltage ■	-135 to +400 volts DC
Spot Position (undeflected)	0.625 " radius (concentric to faceplate)
Line Width ■	0.018 "

MAXIMUM CIRCUIT VALUES :

Grid #1 Circuit Resistance	1.5 meg.
----------------------------	----------

● Visual extinction of undeflected focused spot.

■ Ib2 = 25 μa beam (current).



BOTTOM VIEW

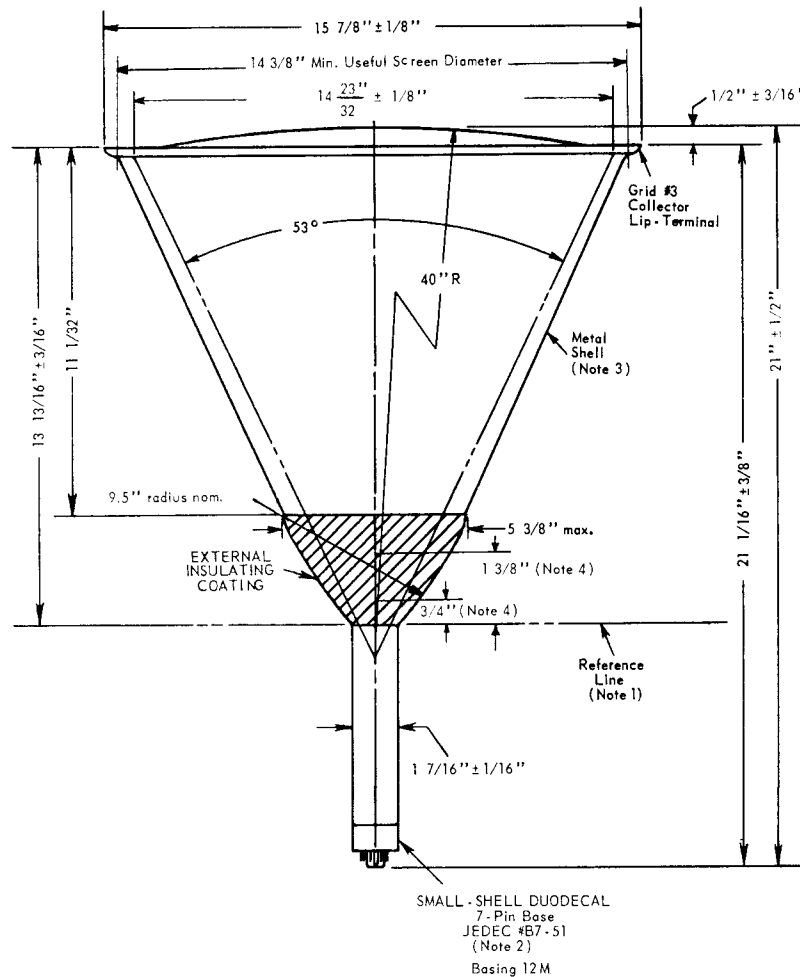


CATHODE RAY TUBE

ELECTRICAL DATA (Cont'd)

NOTES:

- Note 1 : Reference line is determined by position where reference - line gauge (JEDEC #112) 1.500" +0.003" -0.000" I.D. and 2" long will rest on funnel.
- Note 2 : Socket for this base should not be rigidly mounted; it should have flexible leads and be allowed to move freely Bottom circumference of base shell will fall within circle concentric with metal-shell axis and having diameter of 3".
- Note 3 : Metal shell and glass face operate at high voltage. Any material in contact with the shell or the face must be insulated to withstand the maximum applied collector voltage.
- Note 4 : A 3 1/4" diameter gauge shall fall within the region indicated (3/4" to 1 3/8" from reference line).



INDUSTRIAL COMPONENTS DIVISION

RAYTHEON COMPANY

55 CHAPEL ST., NEWTON 58, MASS.