



Excellence in Electronics

TYPE
10QP7

The 10QP7 is a magnetic focus and magnetic deflection cathode ray tube having a long persistence cascade fluorescent screen. A special feature of the 10QP7 is that it produces a small spot of high intensity.

MECHANICAL DATA

BASE: Small Shell Duodecal 6-Pin

CAP: Recessed Small Cavity

TERMINAL CONNECTIONS:

Pin 1 Heater
Pin 2 Grid #1

Pin 11 Cathode
Pin 12 Heater
Cap Grid #2 & Collector

MOUNTING POSITION: Any

GENERAL DATA

Phosphor	#7
Fluorescence	Blue
Phosphorescence	Yellow
Persistence	Long
Deflection Method	Magnetic
Deflection Angle	50°

ELECTRICAL DATA

HEATER CHARACTERISTICS:

Heater Voltage	6.3 volts
Heater Current	6.3 ± 10% amps.
Peak Heater - Cathode Voltage: Max.	
Heater Negative with Respect to Cathode	175 volts DC
Heater Positive with Respect to Cathode	175 volts DC

DIRECT INTERELECTRODE CAPACITANCES: ($\mu\text{fds.}$) (approx.)

Grid #1 to all other electrodes	4.0
Cathode to all other electrodes	3.5

DESIGN CENTER MAXIMUM RATINGS:

Collector Voltage (including Grid #2)	20,000 volts DC
Grid #1 Voltage:	
Negative - Bias Value	350 volts DC
Positive - Bias Value	0 volts DC
Positive - Peak Value	2 volts DC

CHARACTERISTICS AND TYPICAL OPERATION:

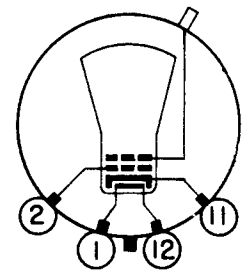
Collector Voltage (including Grid #2)	20,000 volts DC
Grid #1 Voltage \oplus	-63 to -147 volts DC
Spot Position (undeflected)	.590 inch max.

MAXIMUM CIRCUIT VALUES:

Grid #1 Circuit Resistance	1.5 meg. max.
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\oplus Visual extinction of deflected focus spot.

For standard focus coil #106 or equivalent, the focus coil current is approximately 190 MA, D.C. Grid #1 bias voltage and video signal voltage adjusted for 100 microamperes of anode current. The distance from air gap in the focus coil to reference line is 3.25 inches.



BOTTOM VIEW

12H

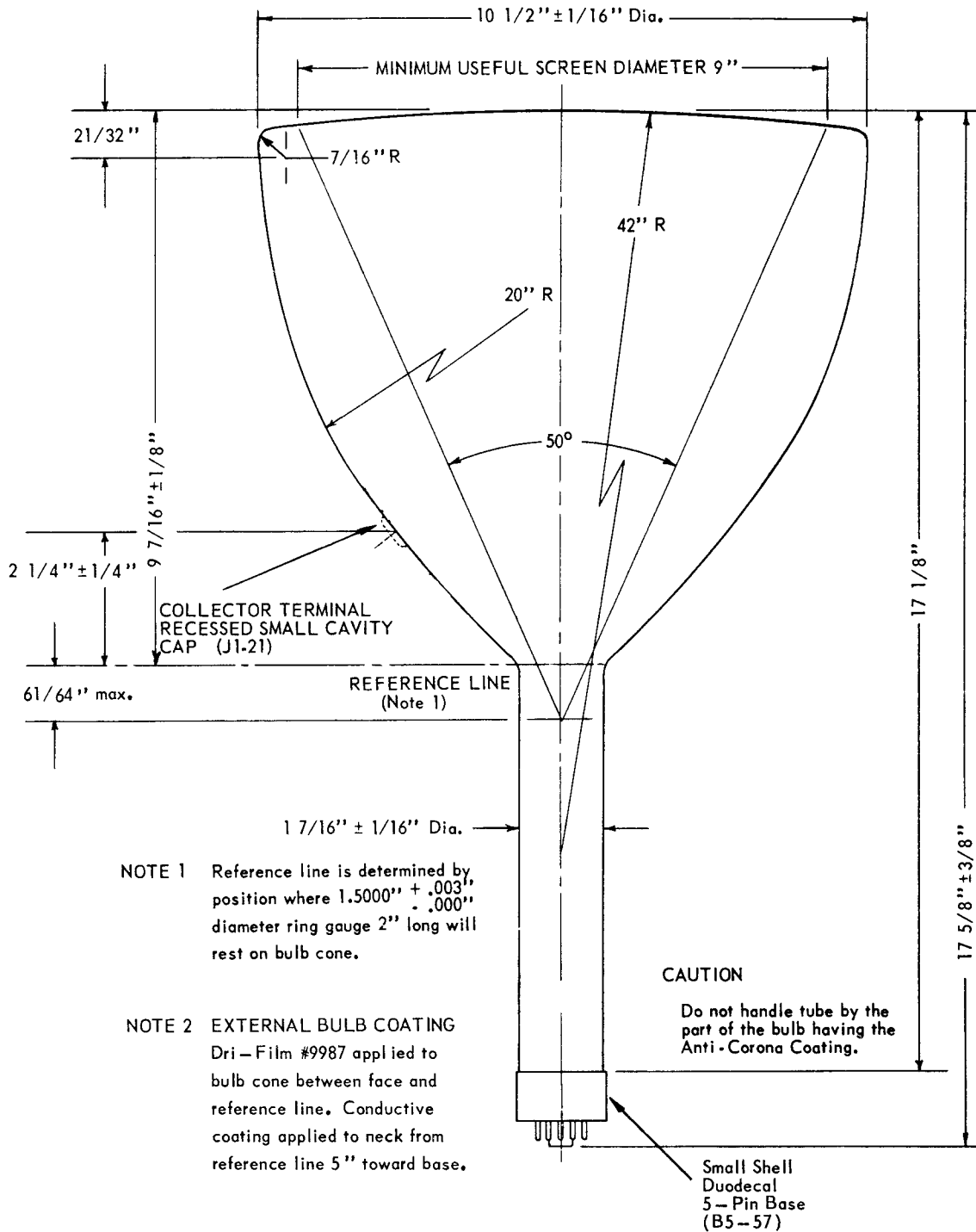
Tentative Data

INDUSTRIAL TUBE DIVISION

RAYTHEON MANUFACTURING COMPANY



CATHODE RAY TUBE



INDUSTRIAL TUBE DIVISION

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