



HIGH RESOLUTION CATHODE RAY TUBES

5" diameter high resolution triode tubes having optically flat faces with ground internal and external surfaces.

FOCUS	...	...	...	Magnetic
DEFLECTION	...	...	...	Magnetic—Angle 60°
SCREEN	5/21AM	5/21PM	5/21QM	
Phosphor Type	'A'	'P'	'Q'	
Fluorescence	Green	Blue	Blue/Violet	
Persistence	Ultra Short	Ultra Short	Killed	

All types have metal-backed screens.

For further details refer to the relevant phosphor characteristics at the front of this section of the handbook.

PHYSICAL DETAILS

Base	...	...	...	B12A (Duodecal)
Anode Cap	...	...	...	CT8 (Cavity type) (JEDEC type J1-21)
Max. Overall Length	...	...	...	350 mm.
Max. Diameter	...	...	...	128 mm.
Nom. Neck Diameter	...	...	...	37 mm.
Min. Useful Screen Area	...	...	...	110 mm.

For other dimensions see drawing overleaf.

BASE CONNECTIONS

Pin 1—Heater	Pin 7—Not connected
Pin 2—Grid	Pin 8—No pin
Pin 3—No pin	Pin 9—No pin
Pin 4—No pin	Pin 10—Not connected
Pin 5—No pin	Pin 11—Cathode
Pin 6—Not connected	Pin 12—Heater

Side contact—Anode

HEATER

Heater Voltage	...	...	...	6.3 volts
Heater Current	...	...	...	0.3 amp.

RATINGS

Max. Anode Voltage	...	...	...	25 kV.
Nom. V_g for visual cut-off	...	...	...	$V_a/210$
Max. V_{hk} (heater negative)	...	...	...	200 volts
Max. V_{hk} (heater positive)	...	...	...	200 volts
Max. R_{gk}	...	...	...	1.5 M Ω

TYPICAL OPERATION

Heater Voltage	...	...	...	6.3 volts
Anode Voltage	...	...	...	20 kV.
V_g for visual cut-off	...	...	...	-90v.
*Screen resolution	...	...	...	1000 lines per inch.

CAPACITANCE

C_k -all	...	...	...	<8 pF.
C_g -all	...	...	...	<8 pF.

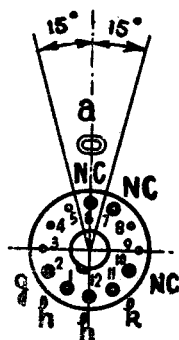
X-RAY WARNING

When operated at an anode voltage in excess of 16kV. X-ray shielding may be required to give protection against the possible danger of injury from prolonged exposure at close range.

5/21 AM

5/21 PM

5/21 QM



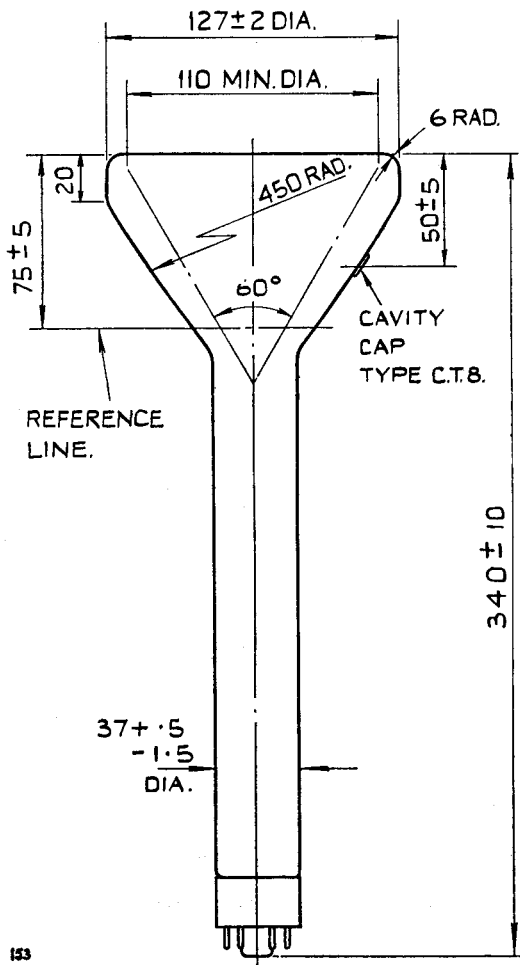
Underside View
of Base



5/21 AM

5/21 PM

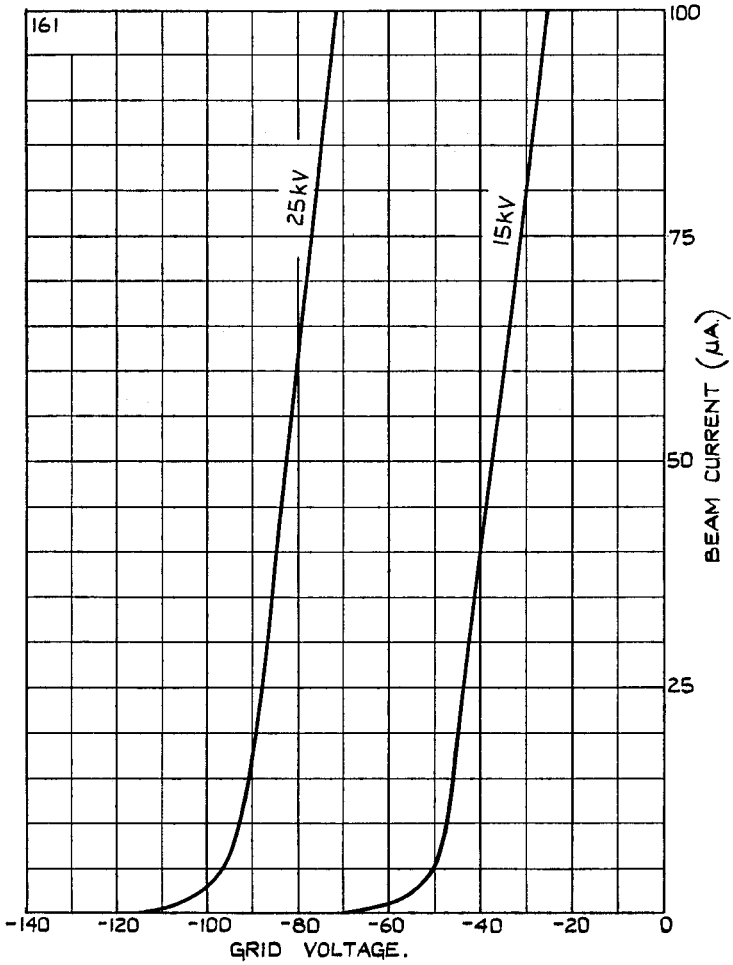
5/21 QM



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5/21 AM
5/21 PM
5/21 QM

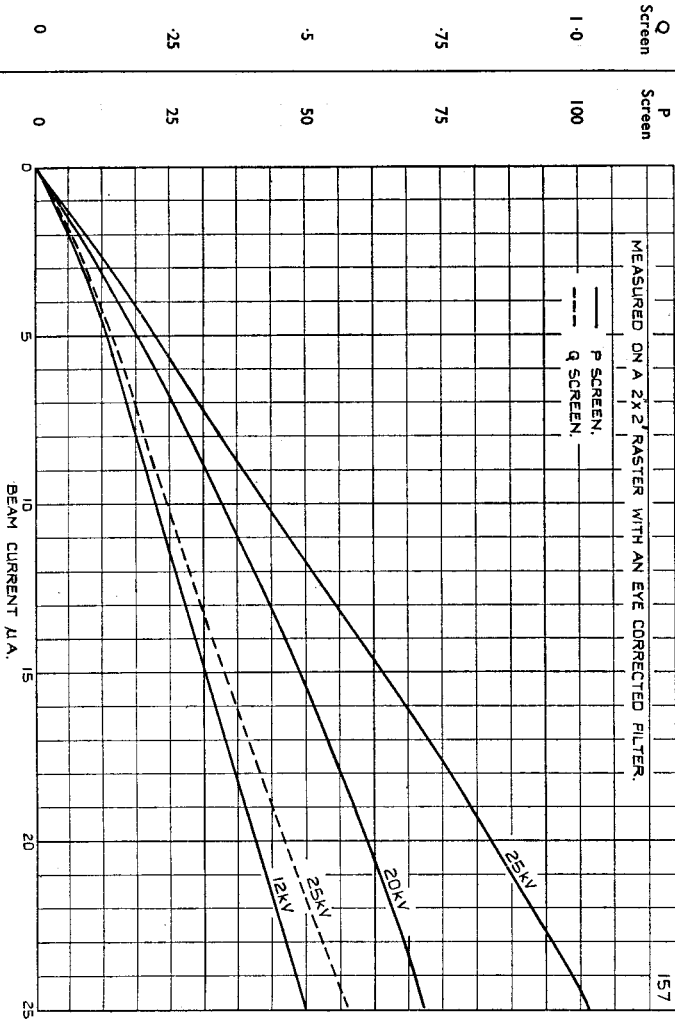
TYPICAL BEAM CURRENT/GRID VOLTAGE CHARACTERISTIC





5/21 AM
5/21 PM
5/21 QM

SCREEN BRIGHTNESS (FOOT/LAMBERTS)



TYPICAL SCREEN BRIGHTNESS CHARACTERISTICS

MEASURED ON A 2X2" RASTER WITH AN EYE CORRECTED FILTER.

— P SCREEN.
- - - Q SCREEN.

BEAM CURRENT (uA).