



CATHODE RAY TUBES

6-inch diameter Tetrode Tubes having optically flat faces with ground internal and external surfaces.

Type 6/44 DM is designed for use in Telerecording and in Television Transmission Systems Converters.

Type 6/44 PM is for use in recording high resolution images on blue sensitive film stock.

FOCUS Magnetic.

DEFLECTION Magnetic.

SCREEN.

Phosphor ...	6/44 DM Type 'D'	6/44 PM Type 'P'
Fluorescence	Green	Blue
Persistence	Short	Ultra-short

Both 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 ...	...	...	CT.8 (Cavity Type).
Max. Overall Length ...	...	...	495 mm.
Max. Diameter ...	...	...	163 mm.
Nom. Neck Diameter ...	...	...	37 mm.
Useful Screen Area ...	...	...	127 mm. dia.

For other dimensions see drawing.

BASE CONNECTIONS.

Pin 1—Heater.	Pin 7—No Connection.
Pin 2—Grid.	Pin 8—No Pin.
Pin 3—No Pin.	Pin 9—No Pin.
Pin 4—No Pin.	Pin 10—1st Anode.
Pin 5—No Pin.	Pin 11—Cathode.
Pin 6—No Connection.	Pin 12—Heater.
Side Contact—2nd Anode.	

HEATER.

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

RATINGS.

Max. A_1 Voltage ...	...	850 volts.
*Max. A_2 Voltage ...	...	30 kV.
†Nom. V_g for visual cut off ...	...	$V_{a1}/7$ volts
Max. V_{hk} (Heater Negative) ...	...	200 volts.
Max. V_{hk} (Heater Positive) ...	...	200 volts.

TYPICAL OPERATION.

1st Anode Voltage ...	...	600 volts.
2nd Anode Voltage ...	...	25 kV.
V_g for visual cut off ...	...	-85 volts.
Grid Drive for $I_B = 100 \mu A$...	...	35 volts.
Screen Resolution at 50 f.p.s. ...	...	1000 lines.
Focus Coil... ..	...	See Note § Below.

CAPACITANCE.

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

X-RAY WARNING.

When operated at an anode voltage in excess of 16 kV. shielding may be required to protect against harmful X-ray radiation which could cause possible injury from prolonged exposure.

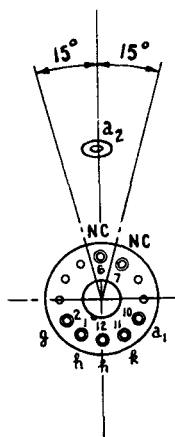
*Recommended operating range—17 to 25 kV.

†The grid should never be positive with respect to the cathode.

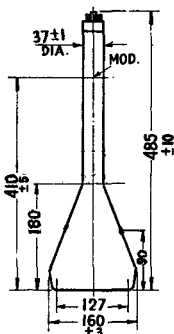
§A suitable coil is a solenoid of approx. 16,000 turns of 38 s.w.g. wire, positioned with the gap approx. 150 mm. in front of the modulator.

6/44DM

6/44PM



Base Connections
Underside View
of Base



All dimensions
shown are in
millimetres.



6/44DM
6/44PM

TYPICAL BEAM CURRENT/GRID VOLTAGE CHARACTERISTICS

