

6704A

G.E.C.

CATHODE RAY TUBES

6704A TELEVISION TUBE

DESCRIPTION

The G.E.C. type 6704A 12" diameter cathode ray tube is intended for high quality television reception, and is magnetically focussed and deflected. The screen fluorescence is white and the tube is indirectly heated.

The outside of the bulb is partially covered with a conductive coating which can be used in conjunction with the internal coating to form a capacitance sufficiently large to use as the reservoir capacitor in an R.F. or fly-back E.H.T. system.

The fluorescent screen is backed with a very thin metallic coating which considerably increases the life of the tube and at the same time gives better picture contrast under normal conditions of use.

RATINGS

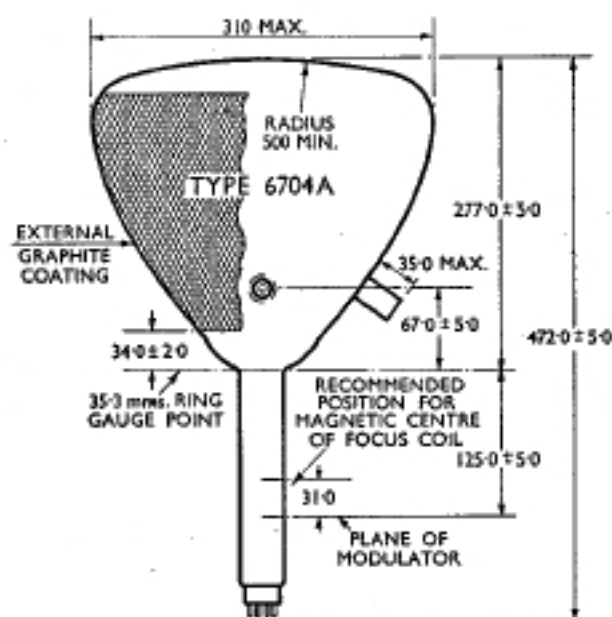
Heater Current	...	...	...	...	...	...	...	0.3	amp
Heater Voltage	...	...	...	...	...	...	...	10.5	approx. volts
Heater/Cathode Voltage	...	...	...	...	...	...	...	150	max. volts
Anode Voltage	...	...	...	...	...	...	...	8000	max. volts
Anode Voltage	...	...	...	...	...	...	...	6000	min. volts
Nominal Modulator Voltage for Cut-off	...	...	...	...	...	...	...	Anode Voltage/150	approx. volts
Modulator Voltage	...	...	...	...	...	...	...	-100	max. volts
Cathode Current	...	...	...	...	...	...	...	100	max. μ A
Modulator/Cathode Resistance	...	...	...	...	...	...	...	1.0	max. megohm
Neck Diameter	...	...	...	...	...	...	...	35.0	max. mm
Neck Diameter	...	...	...	...	...	...	...	33.5	min. mm
Picture Diagonal	277	max. mm

Capacitance :

Modulator to all other electrodes	15	max. pF
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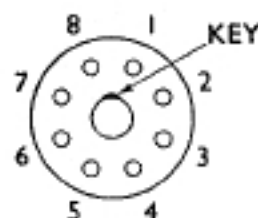
MOUNTING POSITION	Any
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DIMENSIONS



All dimensions are in mm.

BASE



View from underside of base.

INTERNATIONAL OCTAL

pin 1 :	I.C.
2 :	Heater
3 :	I.C.
4 :	I.C.
5 :	Modulator
6 :	I.C.
7 :	Heater
8 :	Cathode
Side Contact :	Anode (flush type)

I.C. indicates that no external connection should be made to this pin.

TYPE 6704A

TYPICAL OPERATING CONDITIONS

Anode Voltage	...	...	...	...	...	...	...	7000	volts
Modulator Cut-off Voltage	...	...	...	...	...	...	...	-47	approx. volts
Mean Signal Input to Modulator	...	...	...	...	...	...	...	23	peak volts
Picture Size	...	...	...	...	...	...	...	263 x 196	mm
Picture Brightness	...	...	...	...	...	...	...	10	e.f.c.

PRECAUTIONS IN USE

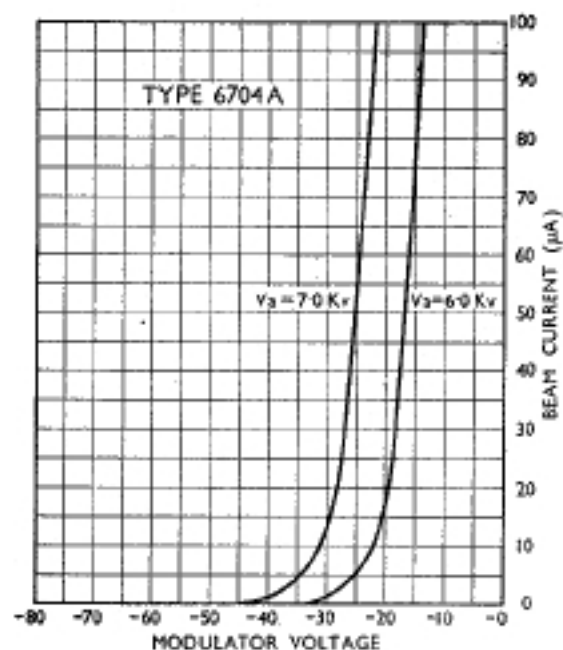
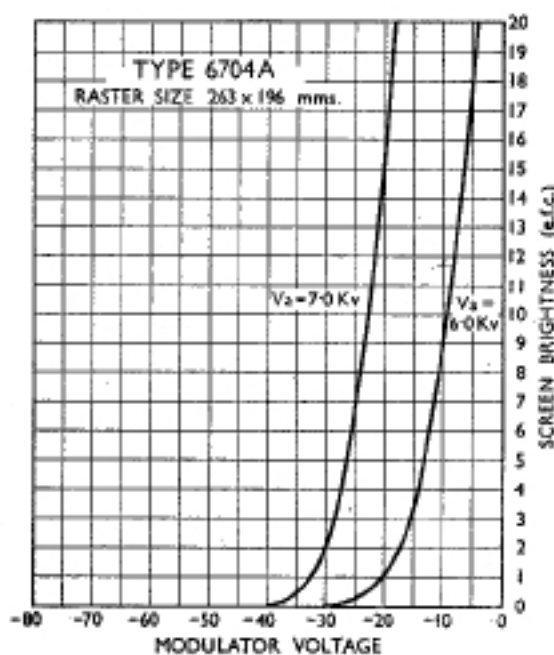
The attention of the user is drawn to the CODE OF PRACTICE FOR USE OF CATHODE RAY TUBES IN EQUIPMENT, B.S. 1147, 1943, obtainable from the British Standards Institution, 28 Victoria Street, London, S.W. 1. Failure to observe the recommendations contained therein may result in poor performance of, or damage to, both tube and equipment.

The tube is designed for use with deflecting coils which position the centre of deflection at 25 mm. approximately from the 35.3 ring gauge point. It will be appreciated that the possibility of cut off of the picture area is intimately linked with the design of the deflecting coils, and focussing system.

It is desirable to maintain the external graphite coating at chassis potential, as otherwise this may acquire a charge capable of imparting an electric shock to the user and/or causing picture interference.

The heater of the tube is suitable for operation in series with a range of 0.3 amp. valves, but it is essential to ensure that the peak surge voltage across the tube heater does not exceed 12.5 volts. A suitable limiting device should be introduced into the circuit to restrict the voltage to this maximum value.

The heater should also be so positioned in the heater chain that the voltage between heater and cathode is kept as low as possible.



AVERAGE CHARACTERISTIC CURVES OF TYPE 6704A CATHODE RAY TUBE.