9.E.C.

CATHODE RAY TUBES

6505A TELEVISION TUBE

DESCRIPTION

The G.E.C. type 6505A 9" 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 Vol	tage		***		***			150	max. volts
Anode Voltage	***							7000	max. volts
Anode Voltage	***		***					5000	min. volts
Nominal Modulator	Voltage	for (Cut-off			 Anode 	volta	ige/150	approx. volts
Modulator Voltage			***	***		***	***	-100	max. volts
Cathode Current					444	444		150	max. μA
Modulator/Cathode	Resistar	ice	***		***			1.0	max. megohm
Neck Diameter								35-0	max. mm
Neck Diameter								33.5	min. mm
Picture Diagonal			***	***		***		208	max. mm
CARACITANCE									
CAPACITANCE									
Modulator to all other electrodes								15	max. pF

MOUNTING POSITION ... Any

DIMENSIONS

RADIUS 900 MIN EXTERNAL 100#10 GRAPHITE COATING 6505 A 1850±50 370 o± 5-o 34-0 ± 2-4 RECOMMENDED POSITION FOR MAGNETIC CENTRE OF FOCUS COIL 35-3 mms. RING GAUGE POINT 280

202_HAX

BASE

KEY

0

of base.

INTERNATIONAL 8-PIN OCTAL

Pin 1: I.C. 2 2: Heater 3: I.C. 4 : I.C. *5: Modulator 6: I.C. 7: Heater View from underside 8: Cathode

Side Contact: Anode (flush type)

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

All dimensions are in mm.

The neck diameter is gauged by a tubular gauge of length 50 mm. and internal diameter 35.3 mm.

TYPICAL OPERATING CONDITIONS

PLANE OF

Anode Voltage								7000	volts
Modulator Cut-off	Voltage -				400	***		-47	approx. volts
Mean signal input	to Modula	tor	***	***	***			20	peak volts
Picture Size							207	$\times 155$	mms
Picture Brightness								10	e.f.c.

TYPE 6505A

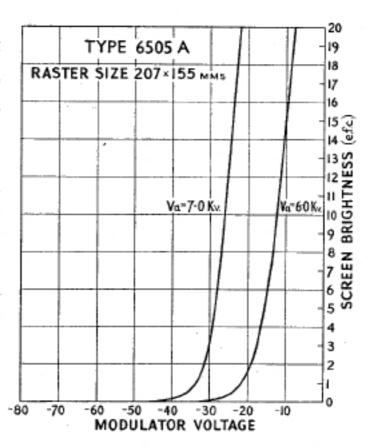
PRECAUTIONS IN USE

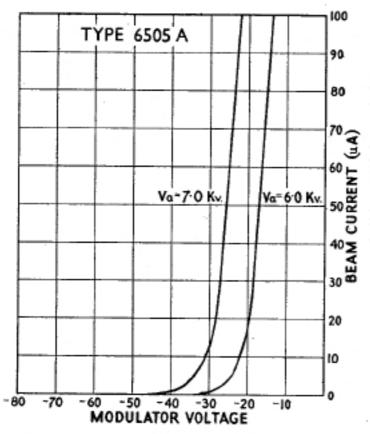
The attention of the user is drawn to the Code of Practice for Use of Cathode Ray Tubes in Equipment, B.S. 1147, 1943, obtainable from the British Standards Institution, 28 Victoria Street, London, S.W.1. Failure to observe the recommendations contained therein may result in poor performance or damage to both tube and equipment.

If it is not desired to apply modulation to the cathode one side of the heater should be connected direct to cathode.

The tube is designed for use with deflecting coils which position the centre of deflection at 25 mm. approximately from the 35.3 mm. 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.

It is desirable to maintain the external graphite coating at chassis potential, otherwise it 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 surge 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.