

G.E.C.

CATHODE RAY TUBES

E-4412-B-9 OSCILLOGRAPHIC TUBE, 3½" SCREEN

DESCRIPTION

The G.E.C. cathode ray tube type E-4412-B-9 has an indirectly heated cathode with separate connection so that modulating voltages can be applied between cathode and modulator without the distortion which might otherwise be caused by the capacitance to earth of the heater transformer.

It is intended for use in portable or fixed oscillographic apparatus for studying a variety of phenomena at high or low frequencies. The screen has a green fluorescence of negligible persistence.

A particular feature of this tube is the short overall length for the high deflection sensitivity obtained.

RATINGS

Heater voltage	...	...	...	...	...	4.0 ± 5%	volts
Heater current	...	...	...	...	...	1.1	approx. amps
First anode voltage (VA1)	...	...	...	...	...	2500	max. volts
Second anode voltage (VA2)	...	...	...	...	...	VA3 × 0.175	mean volts
Third anode voltage (VA3)	...	...	...	...	...	4000	max. volts
						1000	min. volts
Brightness control (modulator or grid) voltage (VM)						-(VA1 × 0.04)	max. volts

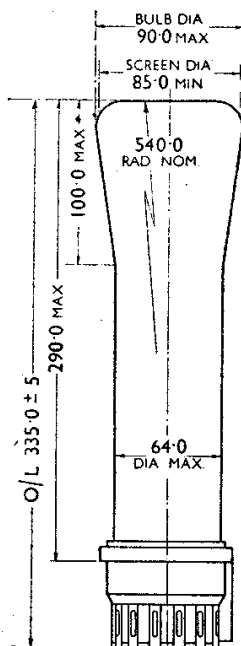
Deflection Sensitivity:

1. Deflectors nearest base X1 and X2	...	...	...	...	...	$\frac{750}{VA3}$	mm/v
2. Deflectors nearest screen Y1 and Y2	...	...	...	...	...	$\frac{350}{VA3}$	mm/v

Capacitances :

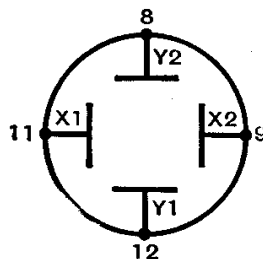
Modulator (grid) to all other electrodes	...	...	...	...	...	25	max. pF
Either X or Y deflector to all other electrodes	...	...	...	...	...	25	max. pF
Either X to either Y deflector, other electrodes earthed	...	...	...	...	...	6	max. pF

DIMENSIONS



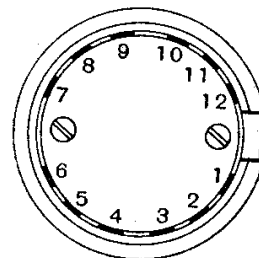
All dimensions are in mm. and are the maximum except where otherwise stated.

DEFLECTOR PLATES



With the tube viewed from the screen end with the base spigot uppermost, a positive potential applied to contact 11 will deflect the spot to the left and a positive potential applied to contact 12 will deflect the spot downwards.

BASE



View of underside of base

PIN CONNECTIONS

Pin 1 :	Modulator
2 :	Cathode
3 :	Heater
4 :	Heater
5 :	A1
6 :	A2
7 :	Graphite
8 :	Y2 deflector
9 :	X2 deflector
10 :	A3
11 :	X1 deflector
12 :	Y1 deflector

