

GENERAL

The 21N12 is a convection cooled mercury vapour thyatron. It has an indirectly heated oxide coated cathode and is intended for use in power supplies and welding equipment, etc.

RATINGS—Absolute values

Heater voltage	V_h	$5.0 \pm 5\% V$
† Heater current (nominal)	I_h	5.0 A
Maximum peak forward anode voltage		10 kV
Maximum peak inverse anode voltage	P.I.V. _{max}	10 kV
Maximum surge peak inverse voltage		20 kV
Maximum anode voltage drop		18 V
Maximum mean cathode current (max averaging 15 sec)	$I_{k(av)max}$	3.0 A
Maximum peak cathode current	$i_{k(pk)max}$	25 A
Maximum surge cathode current (0.1 sec)		250 A
Maximum grid resistance	$R_{g(max)}$	100 k Ω
Maximum supply frequency		150 c/s
Condensed mercury temperature limits	T_{Hg}	35 to 70 °C

† The heater must be switched on for a minimum of three minutes before the anode voltage is applied.

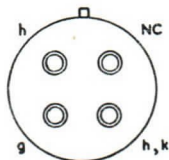
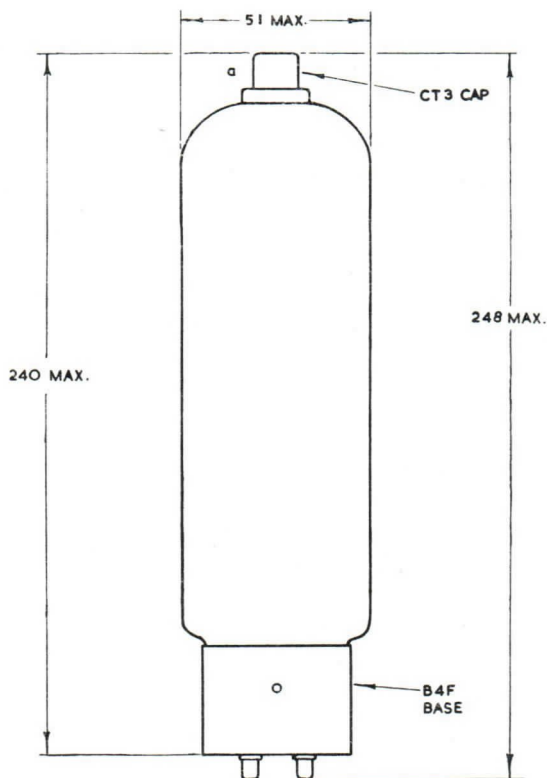
MOUNTING POSITION—Vertical, base down.**CHARACTERISTICS**

Critical grid current (at $V_a = 6kV$)		<10 μA
Control ratio (nominal)		200 : 1
Ionisation time (approx)	t_i	10 μs
De-ionisation time (approx)	t_d	1,000 μs

21N12

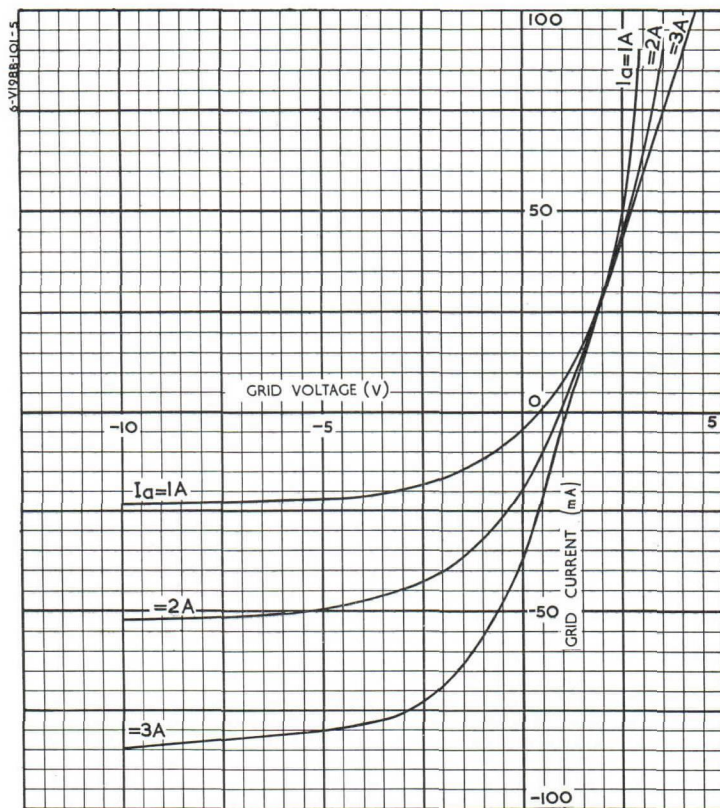
Mercury Vapour Thyatron

AEI



VIEW OF FREE END.

All dimensions in millimetres.

CHARACTERISTIC CURVES: I_g/V_g 

CHARACTERISTIC CURVES: T_{Hg}/t 