

**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.

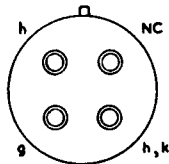
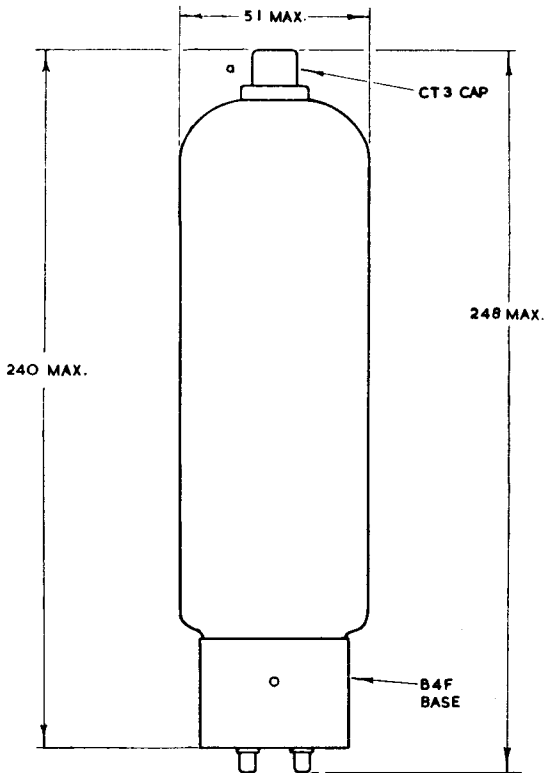
**RATINGS—Absolute values**

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	$k\Omega$
Maximum supply frequency		150	c/s
Condensed mercury temperature limits	$T_{Hg}$	35 to 70	$^{\circ}C$

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

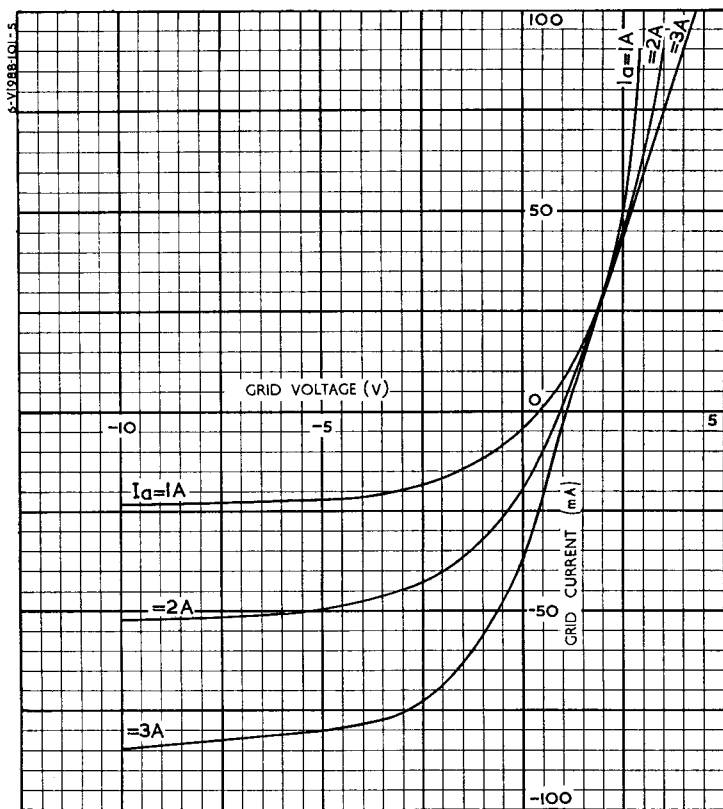
**MOUNTING POSITION—Vertical, base down.**
**CHARACTERISTICS**

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



VIEW OF FREE END.

All dimensions in millimetres.

**CHARACTERISTIC CURVES :  $I_g/V_g$** 



CHARACTERISTIC CURVES :  $T_{Hg}/t$

