

GENERAL

The 21B12 is an inert gas filled thyatron suitable for welding or motor control. It has a directly heated oxide coated cathode.

RATINGS

Filament voltage	V_f	2.5	V
Filament current	I_f	9.0	A
Maximum peak forward anode voltage		1.0	kV
Maximum peak inverse anode voltage		1.25	kV
Maximum mean cathode current	$I_{k(av)max}$	2.5	A
Maximum peak cathode current	$i_{k(pk)max}$	30	A
Maximum surge cathode current (max duration 0.1 sec)		300*	A
Maximum negative grid voltage before conduction	$V_{g(max)}$	-300	V
Maximum negative grid voltage after conduction	$V_{g(max)}$	-10	V
Control ratio		200 : 1	
Maximum striking voltage for conduction		70	V
Voltage drop		12	V
Maximum grid resistance range		10—100†	k Ω
Ionisation time	t_i	10	μ s
Deionisation time	t_d	1000	μ s
Commutation factor (V/μ s \times A/ μ s)		0.7	
Ambient temperature range		-55 to +75	$^{\circ}$ C

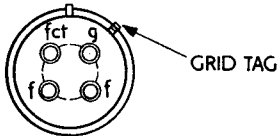
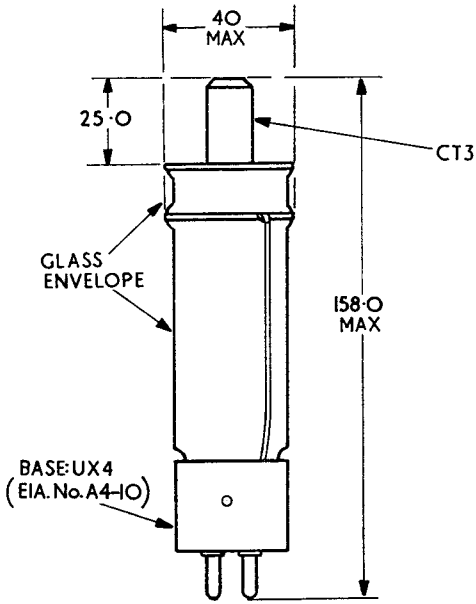
* Recommended anode fuse = 6A. Maximum anode fuse = 10A.

† Recommended value = 33k Ω .

INTER-ELECTRODE CAPACITANCES

Anode/grid	C_{a-g}	3.8	pF
Anode/filament	C_{a-f}	0.15	pF
Grid/filament	C_{g-f}	2.5	pF

MOUNTING POSITION—Unrestricted



TOP CAP-ANODE

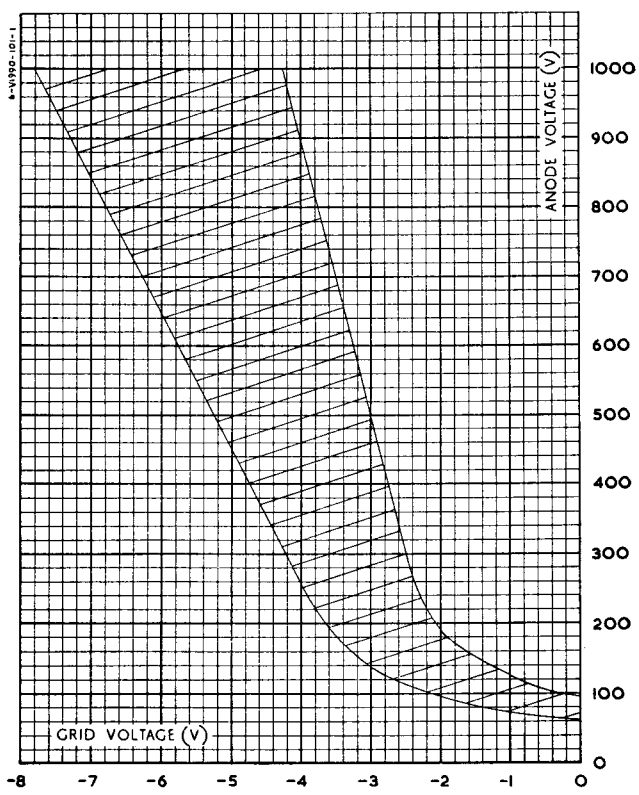
VIEW OF FREE END

6-21B12-90-T

All dimensions in millimetres



CHARACTERISTIC CURVES : V_a/V_g





CHARACTERISTIC CURVES : I_g/V_g

