



19H12
HIGH VACUUM DIODE
 Directly heated
TENTATIVE

GENERAL

The 19H12 is an Inverse Damping Diode intended for use in radar transmitters to prevent voltage overswings.

RATING

Filament Voltage (volts)	V_h	4.0
Filament Current (amps)	I_h	12.0
Maximum Anode Dissipation (watts)	$P_a(\max)$	50
Maximum Peak Inverse Voltage (kV)	$PIV(\max)$	25
Maximum Peak Pulse Current (Normal) (amps)	$i_k(pk)\max$	30*
Maximum Peak Pulse Current (Fault) (amps)	$i_k(fault)\max$	50†
Approximate Pulse Impedance at 30 amps (ohms)	D.C. Resistance	23

* Maximum pulse length $10\mu s$. For mean and r.m.s. currents see rating chart.

† For 1 second maximum. For further details see fault rating chart.

The filament must be switched on for 30 seconds before the anode voltage is applied.

All maximum ratings are Absolute values not Design Centres.

INTER-ELECTRODE CAPACITANCES (pF)

Anode/Filament	C_{a-f}	27.8
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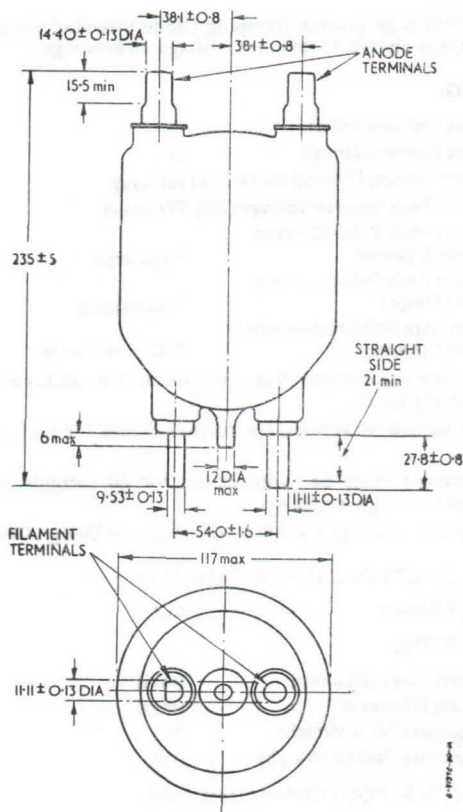
DIMENSIONS

Maximum Overall Length	(mm)	240
Maximum Diameter	(mm)	120
Approximate Nett Weight	(lb)	$1\frac{3}{4}$
Approximate Packed Weight	(lb)	$6\frac{1}{2}$

MOUNTING POSITION—Unrestricted.

TOP CAPS—CT3

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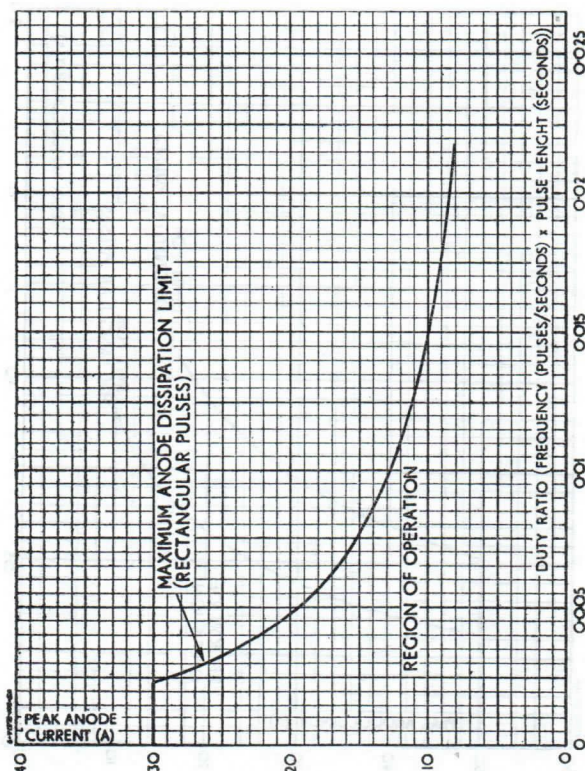


All dimensions in mm.

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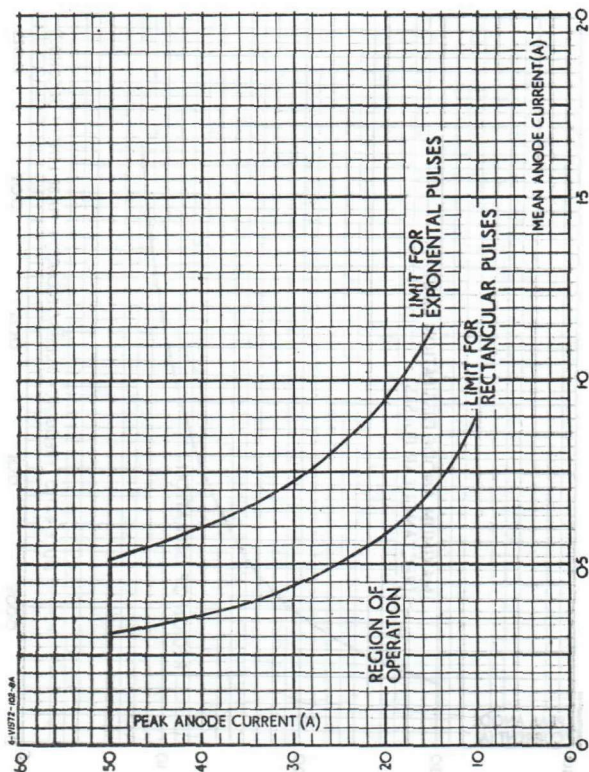
RATING CHART: $I_a(pk)/\text{Duty Ratio}$
Normal Conditions

The Chart gives Absolute Maximum values, not Design Centres



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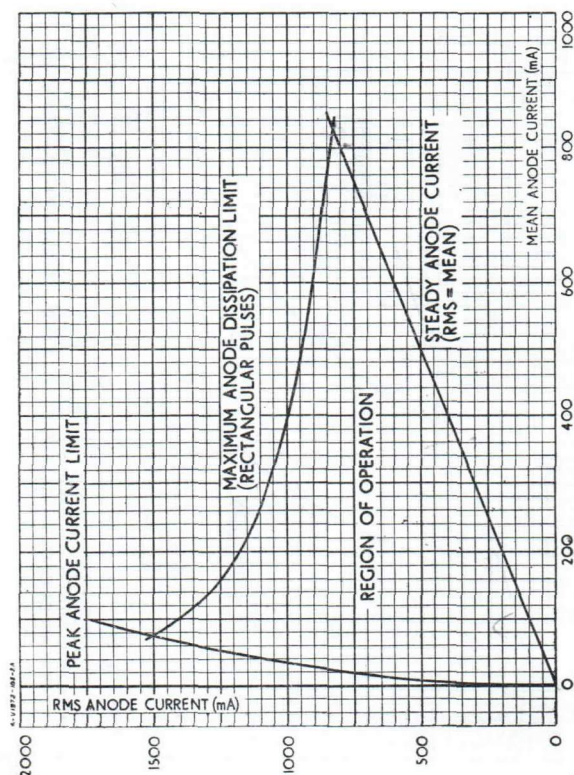
RATING CHART: $I_a(pk)/I_a(av)$
Fault Conditions. Maximum Fault Duration = 1 sec.
The Chart gives Absolute Maximum values, not Design Centres



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RATING CHART
Normal conditions

The Chart gives Absolute Maximum values, not Design Centres



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RATING CHART: $I_a(pk)/I_a(av)$
 Normal Conditions

The Chart gives Absolute Maximum values, not Design Centres

