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) $P_a(\text{max})$  50
Maximum Peak Inverse Voltage (kV) $P I V(\text{max})$  25
Maximum Peak Pulse Current (Normal) (amps) $i_k(pk)\text{max}$  30*
Maximum Peak Pulse Current (Fault) (amps) $i_k(fault)\text{max}$  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 $\epsilon_{a-f}$  27.8

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
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
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RATING CHART: $I_a(pk)/$Duty Ratio
Normal Conditions
The Chart gives Absolute Maximum values, not Design Centres

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Associated Electrical Industries Limited
Electronic Components Division
Tel.: GERrard 9797
19H12
HIGH VACUUM DIODE
Directly heated
TENTATIVE

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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