

EDISWAN

MAZDA

19.H.5

HIGH VACUUM DIODE

Indirectly heated—for Voltage Damping and Power Rectification

19H5

RATING †

Heater Voltage (volts)	V_h ‡	4.0
Heater Current (amps)	I_h	4.0
Maximum Anode Dissipation (watts)	$P_a(\max)$	32

As damping Diode

Maximum Anode Current pulsing - 2 microseconds maximum (amps)	$I_a(\max)\text{pulse}$	10
Maximum Peak Inverse Voltage short pulse rating or transients (kV)	P.I.V. (max)	27
Maximum Peak Inverse Voltage short pulse rating or transients (Fault Condition) (kV)		‡ 35
Approximate Impedance at 8 amps Peak (ohms)	r_a	100

As power Rectifier or Delay line Charging Diode

Maximum Mean Anode Current - at 4:1 Peak/Mean (choke filter) (mA)	$I_a(\max)av$	180
Maximum Mean Anode Current - at 8:1 Peak/Mean (capacity filter) (mA)	$I_a(\max)av$	‡ 125
Maximum R.M.S. Anode Current (mA)	$I_a(\max)r.m.s.$	350
Maximum Peak Inverse Voltage - No load (kV)	P.I.V.(max)∅	20
Maximum Peak Inverse Voltage - On load (kV)	P.I.V.(max)	18
Maximum Peak Inverse Voltage (Fault Condition) 5 seconds duration (kV)	P.I.V.(max) Fault	30

This valve is a very low impedance diode intended for use as a charging and damping diode in radar applications. It can also be used as a Power Rectifier at mains frequencies.

‡ The Heater must be switched on for 30 seconds before the Anode Voltage is applied.

∅ For a maximum period of 50 milliseconds.

‡ All Maximum ratings are absolute values not design centres.

‡ When used with a capacity input filter, the effective resistance in the anode circuit should not be less than 1600 ohms.

DIMENSIONS

Maximum Overall Length (mm)	240
Maximum Diameter (mm)	57
Approximate Nett Weight (ozs)	7
Approximate Packed Weight (ozs)	18

MOUNTING POSITION - Unrestricted

February 1954

VALVE & CRT DIVISION

Indicates a change ←

Issue 2/6

SIEMENS EDISON SWAN LIMITED

19H5

EDISWAN

MAZDA

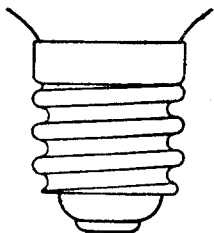
19.H.5

HIGH VACUUM DIODE

Indirectly heated—for Voltage Damping and Power Rectification

BULB Clear

BASE Goliath Ediswan Screw Cap



CONNEXIONS

Contact 1	Heater	h
Contact 2	Heater	h
Top Cap	Anode	a

NOTE

The Heater is connected internally to cathode