

MAZDA

UI91

EFFICIENCY DIODE

Indirectly heated—for series operation

UI91

GENERAL

The UI91 is intended for use as an Efficiency Diode in television receivers having series connected heaters and is suitable for A.C./D.C. operation.

RATING

Heater Current (amps)	I_h		0.3
Heater Voltage (volts)	V_h		19.0
Maximum Peak Inverse Anode P.I.V. (max) Voltage (kV)			4.5*‡
Maximum Anode Current (mean) (mA)	I_a (av) max	120	150
Maximum Anode Current (peak) (mA)	I_a (pk) max	600	450
Maximum Heater-Cathode Voltage (volts) (h—ve, D.C. + Peak A.C.)	V_{h-k} (max)		900†
Maximum Heater-Cathode Voltage (h—ve, pulse) (kV)	V_{h-k} (pk) max		4.5*‡
Maximum Heater to Anode Volts (h+ve pulse) (kV)	V_{a-h} (max)		3*

* Rated for T.V. Line Scan where the duty cycle does not exceed 15% and the pulse duration does not exceed 15 μ secs.

† Measured with respect to the higher potential heater pin. The D.C. component should not exceed 600 volts.

‡ 4.5 kV is a Design Centre Rating. The absolute rating of 5.3 kV must not be exceeded.

INTER-ELECTRODE CAPACITANCES (pF)

Anode to Heater plus Cathode	$C_{a-h,k}$	7.7
Cathode to Heater plus Anode	$C_{k-h,a}$	9.0

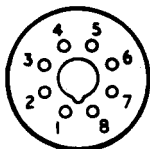
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DIMENSIONS

Maximum Overall Length (mm)	90
Maximum Diameter (mm)	32
Maximum Seated Height (mm)	77
Approximate Nett Weight (ozs)	1 $\frac{1}{4}$
Approximate Packed Weight (ozs)	2 $\frac{1}{4}$

MOUNTING POSITION—Unrestricted.BULB—ClearTOP CAP—CT1BASE—International Octal (IO5)

Viewed from Free End of Pins

CONNECTIONS

Pin 1	No Pin	NP
Pin 2	Internal Connection	IC
Pin 3	Internal Connection	IC
Pin 4	No Pin	NP
Pin 5	Anode	a
Pin 6	No Pin	NP
Pin 7	Heater	h
Pin 8	Heater	h
Cap	Cathode	k

NOTE: When the anode is pulsed, it is recommended that contacts 1 and 6 on the valve holder should be removed.

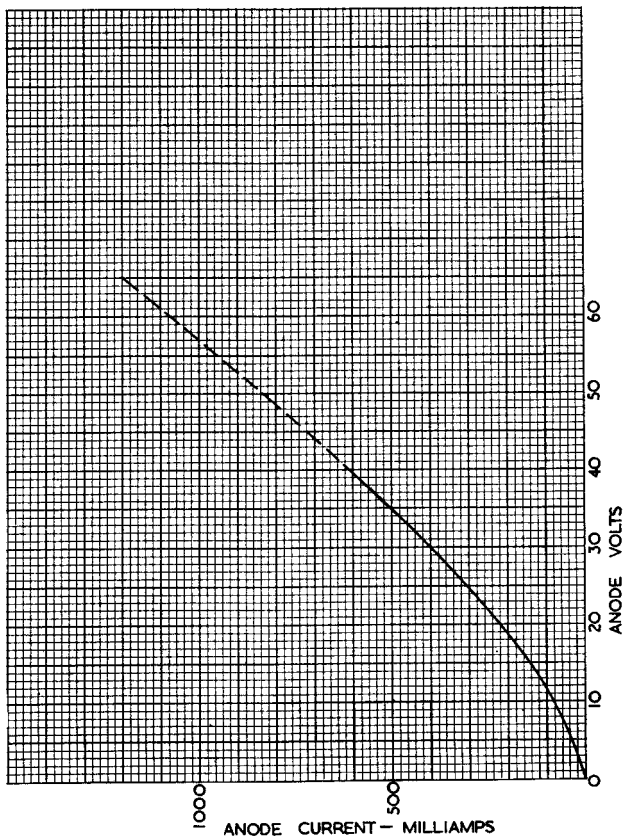
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VALVE & CRT DIVISION

Issue 1/2

SIEMENS EDISON SWAN LIMITED