

Type 19CS4

EFFICIENCY DIODE  
Indirectly heated—for series operation

**GENERAL**

The U19I 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  $\mu$  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

**DIMENSIONS**

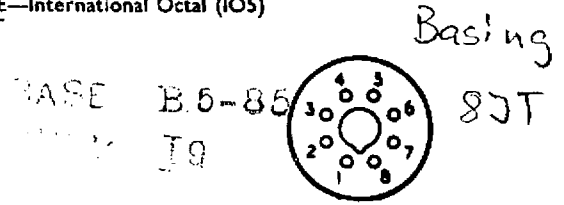
Maximum Overall Length (mm)	90
Maximum Diameter (mm)	32
Maximum Seated Height (mm)	77
Approximate Nett Weight (ozs)	1½
Approximate Packed Weight (ozs)	2½

**MOUNTING POSITION**—Unrestricted.

**BULB**—Clear

**TOP CAP**—CT1

**BASE**—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.

