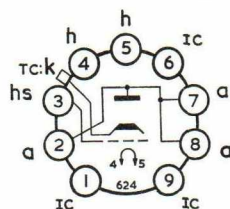


## EFFICIENCY DIODE



B9D Base, CT1 Cap

## GENERAL

This efficiency diode is for use in the timebase circuits of colour television receivers having series connected heaters (a.c. or d.c.).

|                |       |     |   |
|----------------|-------|-----|---|
| Heater Current | $I_h$ | 0.3 | A |
| Heater Voltage | $V_h$ | 42  | V |

During operation the minimum resistance between any heater pin and any mains terminal for the heater chain should be  $100\Omega$ . The hot heater resistances of the other valves in the chain can serve for this resistance.

## DESIGN CENTRE RATINGS

|                                        |                          |                  |    |
|----------------------------------------|--------------------------|------------------|----|
| Maximum Anode Dissipation              | $P_a(\max)$              | 11               | W  |
| Maximum Peak Inverse Voltage           | $P.I.V.\max$             | $5.6^{*}\dagger$ | kV |
| Maximum Peak Heater to Cathode Voltage | $V_{h-k}(\text{pk})\max$ |                  |    |
| Heater Negative                        |                          | 6.3*             | kV |
| Maximum Anode Current                  | $I_a(\max)$              | 440              | mA |
| Maximum Peak Anode Current             | $I_a(\text{pk})\max$     | 800              | mA |

\* Maximum pulse duration 22% of one cycle with a maximum of  $18\mu\text{s}$ .

† Absolute maximum rating is 7.0kV.

## INTER-ELECTRODE CAPACITANCES

|                   |           |     |    |
|-------------------|-----------|-----|----|
| Anode to Cathode  | $C_{a-k}$ | 13  | pF |
| Heater to Cathode | $C_{h-k}$ | 3.7 | pF |

## CHARACTERISTICS

|                     |       |      |          |
|---------------------|-------|------|----------|
| Anode Current       | $I_a$ | 440  | mA       |
| Internal Resistance | $r_i$ | 45.5 | $\Omega$ |

## Note:

Insertion of a 1.0W non-inductive  $330\Omega$  carbon resistor between pins 3 and 5 is recommended to improve the high-tension properties of the valve. If no resistor is used, pins 3 and 4 should be interconnected.

