

**ESU101**  
**HALF-WAVE MERCURY VAPOUR RECTIFIER**  
**TENTATIVE**

**GENERAL**

The ESU101 is a directly heated high voltage half-wave mercury vapour rectifier, which has been designed for use in radio relay amplifiers.

**RATING**

|   |              |          |
|---|--------------|----------|
| Filament Voltage (volts)                            | $V_f$        | 4.0      |
| Filament Current (amps)                             | $I_f$        | 2.7      |
| Maximum Peak Inverse Voltage (kV)                   | P.I.V.(max)  | 10.0     |
| Maximum Peak Anode Current (amps)                   | $I_a(pk)max$ | 1.25     |
| Maximum Mean Anode Current(amps)                    | $I_a(av)max$ | 0.25     |
| Voltage Drop (approx) (volts)                       | $V_{drop}$   | 16       |
| Condensed Mercury Temperature Range ( $^{\circ}C$ ) |              | 20 to 60 |
| Heating Time (seconds)                              |              | 60       |

**DIMENSIONS**

|                           |       |                |
|---------------------------|-------|----------------|
| Maximum Overall Length    | (mm)  | 139            |
| Maximum Diameter          | (mm)  | 48             |
| Approximate Nett Weight   | (ozs) | 2              |
| Approximate Packed Weight | (ozs) | $3\frac{1}{4}$ |

**MOUNTING POSITION** Vertical, base downwards.

**TYPICAL OPERATION**

A Biphase Half Wave Rectifier using two valves can give an output of 500 mA at 3.2 kV.

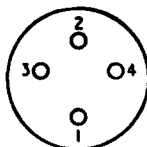
**NOTES**

The H.T. supply to the anode should not be switch on until the specified filament heating time has elapsed. When newly installed or after a period of disuse the filament should be run at normal temperature for 15 minutes before the application of the H.T. voltage.

**ESU101**  
**HALF-WAVE MERCURY VAPOUR RECTIFIER**  
**TENTATIVE**

BULB Clear.

BASE British 4 Pin (B4).



Viewed from free end of pins.

CAP  $\frac{1}{8}$  ins. diameter.

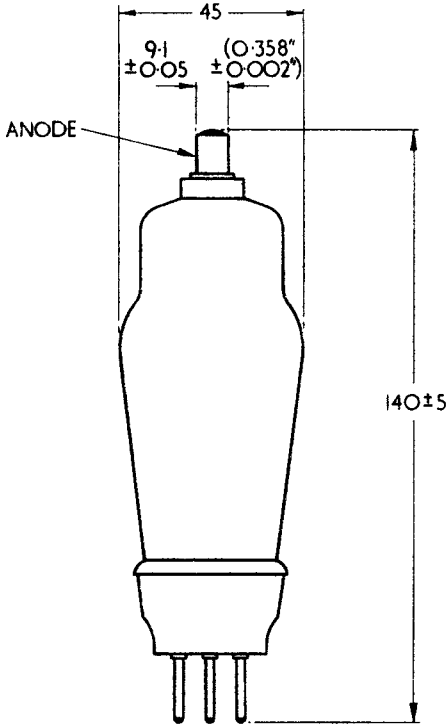
VALVEHOLDER EDISWAN CLIX VH300/4, VH42/4.

TOP CAP CONNECTOR EDISWAN CLIX TC434

**CONNECTIONS**

|         |               |    |
|---------|---------------|----|
| Pin 1   | No Connection | NC |
| Pin 2   | No Connection | NC |
| Pin 3   | Filament      | f  |
| Pin 4   | Filament      | f  |
| Top Cap | Anode         | a  |

**ESU101**  
**HALF-WAVE MERCURY VAPOUR RECTIFIER**  
**TENTATIVE**



ESU101

All Dimensions in mm unless stated otherwise.