



## U.403

### AC/DC MAINS HALF WAVE RECTIFIER

#### RATING.

|                                |     |     |     |     |     |     |      |
|--------------------------------|-----|-----|-----|-----|-----|-----|------|
| Heater Voltage                 | ... | ... | ... | ... | ... | ... | 40.0 |
| Heater Current (Amps.)         | ... | ... | ... | ... | ... | ... | 0.2  |
| Maximum Anode Voltage (R.M.S.) | ... | ... | ... | ... | ... | ... | 250  |
| Maximum Output Current (mA.)   | ... | ... | ... | ... | ... | ... | 120  |

#### TYPICAL OPERATION.

|                                  |     |     |     |      |      |      |      |
|----------------------------------|-----|-----|-----|------|------|------|------|
| Input Volts (R.M.S.)             | ... | ... | ... | 200  | 230  | 200  | 230  |
| D.C. Load Current (mA.)          | ... | ... | ... | 90   | 90   | 120  | 120  |
| Reservoir Capacity ( $\mu$ F.)   | ... | ... | ... | 16   | 16   | 16   | 16   |
| D.C. Rectified Output            | ... | ... | ... | 193* | 237* | 175* | 218* |
| D.C. Volts Drop across Rectifier | ... | ... | ... | 8.5  | 8.5  | 11   | 11   |

\* Voltage Output with 50 ohms limiting resistance in series with rectifier.

#### DIMENSIONS.

|                        |     |     |     |     |     |         |
|------------------------|-----|-----|-----|-----|-----|---------|
| Maximum Overall Length | ... | ... | ... | ... | ... | 100 mm. |
| Maximum Diameter       | ... | ... | ... | ... | ... | 38 mm.  |

#### GENERAL.

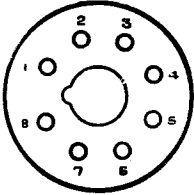
The U.403 is an indirectly heated half wave rectifier suitable for use in A.C./D.C. receivers. The bulb is metallised, and the valve is fitted with a Mazda octal base, the connexions to which are given overleaf.

#### APPLICATION.

To safeguard the valve from the large current surges present on switching, it is imperative to use a 50-ohm resistance in series with the anode. In A.C./D.C. receivers it is usually desirable to connect this resistance in series with the reservoir condenser in order not to reduce the voltage output on D.C. mains. The reservoir capacity should not exceed 16  $\mu$ F. unless an appreciably higher limiting resistance is employed. In use, the metal coating should be connected to the chassis.

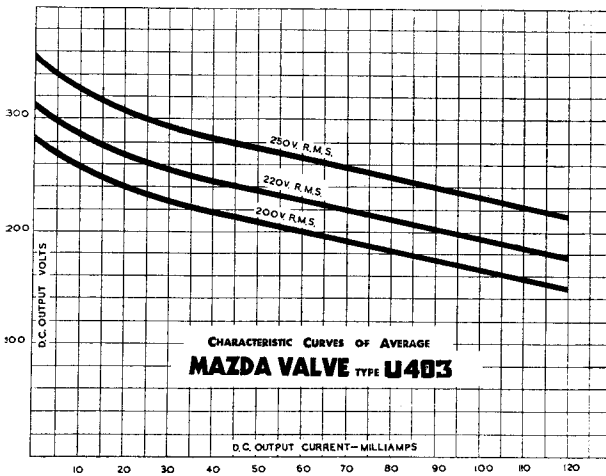


**BASING.**



Viewed from the free end of the base.

- Pin No. 1. Heater.
- 2. Omitted.
- 3. Cathode.
- 4. Omitted.
- 5. Anode.
- 6. Metallising.
- 7. Omitted.
- 8. Heater.



*Mazda Radio Valves are manufactured in Great Britain for the British Thomson - Houston Co., Ltd., London and Rugby, and distributed by*

**THE EDISON SWAN ELECTRIC CO., LTD.**  
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