



## U. 4020

### A.C./D.C. MAINS HALF WAVE RECTIFIER

#### RATING.

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

#### TYPICAL OPERATION.

Input Volts (RMS.)	...	...	...	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		11.0	

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

#### DIMENSIONS.

Maximum Overall Length	...	...	...	...	...	122 mm.
Maximum Diameter	...	...	...	...	...	38 mm.

#### GENERAL.

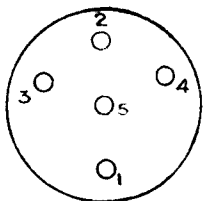
The U.4020 is an indirectly heated half wave rectifier, suitable for use in A.C./D.C. receivers. The valve is fitted with a standard 5-pin base the connexions to which are given overleaf.

#### APPLICATION.

Owing to the very low internal impedance of this valve a limiting resistance should be placed in the anode circuit to prevent the development of momentary arcs between anode and cathode due to switching surges. The minimum value of this resistance should be 50 ohms, and it should be connected between the anode and the smoothing circuit. Due to the use of an indirectly heated cathode the rectified H.T. voltage is developed slowly, and this will be found to be of considerable advantage when high power output valves are used or when electrolytic condensers are used in the smoothing circuits. The heater is designed to operate at 0.2 amps., and the series heater resistance should be such that the filament current has this value at average line voltage.

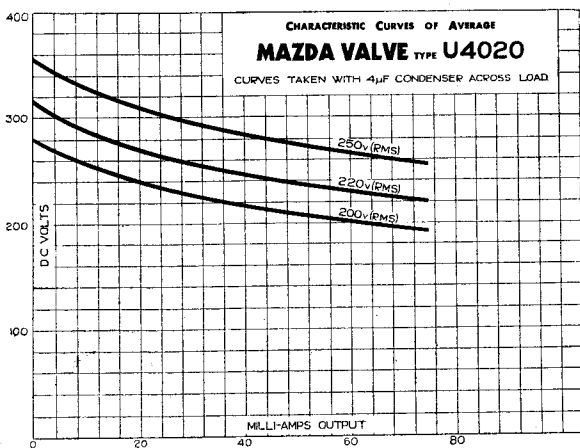


**BASING.**



- Pin No. 1. Anode.
- 2. —
- 3. Heater.
- 4. Heater.
- 5. Cathode.

Viewed from the free end, of the base.



*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.  
155, CHARING CROSS ROAD, LONDON, W.C.2**

