MAZDA

UD41

RECTIFIER FOR VOLTAGE DOUBLING CIRCUITS

RATING.

Heater Voltage	4·0
Heater Current (Amps.)	1·15
Maximum Anode Voltage (RMS per anode)	550
Maximum Mean Anode Current (mA.)...	35

TYPICAL OPERATION.

Transformer Secondary Volts, RMS (VI)	500	500	550	550	550
Mean Anode Current (mA.) ...	20	20	25	25	30
D.C. Output Volts (Vo.) ...	1,240	1,240	1,320	1,320	1,380
C1 (μF.)	2	2	2	2	2
C2 (μF.)	2	4	2	4	4
Ripple Volts (RMS 100 $\sim$ approx.)	12·5	7·5	15·5	9·5	11

DIMENSIONS.

Maximum Overall Length	125 mm.
Maximum Diameter	45 mm.

GENERAL.

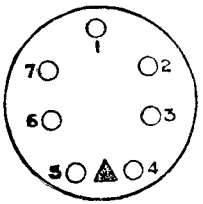
The UD.41 is an indirectly heated voltage doubler designed for use in H.T. supply units for television scanning time bases. The valve is fitted with a standard 7-pin base, the connexions to which are given overleaf.

APPLICATION.

Due to the valve having a suitable heating time the use of this valve in the time base circuits of a television receiver using an electrostatic tube obviates the use of delayed switching when used to provide the H.T. supply. At the same time the screen of the cathode ray tube will be safeguarded. T.31 thyratrons and AC/P.4 valves (in paraphase amplifier) are recommended for use in the time base circuit.

The heaters of vision and sound receivers as well as the time base valves reach operating temperature before the UD.41 applies the H.T. supply to the time base. A short period after the scanning voltage is applied to the deflecting plates of the cathode ray tube, the U.21 (in the tube H.T. supply unit) reaches its operating temperature and the H.T. is applied to the cathode ray tube anodes. With this sequence of operation it is possible to safeguard not only the cathode ray tube, but also to eliminate the possibility of burning the screen with a stationary spot.

BASING.



Viewed from the free end of the base.

Pin No. 1. —
2. —
3. Heater 1 and Cathode 1.
4. Heater 1.
5. Heater 2.
6. Heater 1, Cathode 2 and Anode 1.
7. Anode 2.

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.