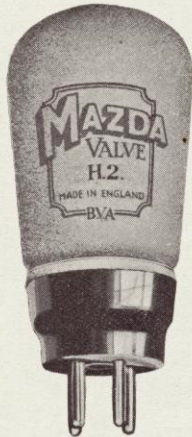


# MAZDA

## H.2

### General Purpose Valve



#### RATING.

Filament Volts	...	...	...	...	2.0
Filament Amps.	...	...	...	...	0.1
Maximum Anode Volts	...	...	...	...	150
*Mutual A.C. Conductance (mA/V)	...	...	...	...	1.1
*Amplification Factor...	...	...	...	...	50
*Anode A.C. Resistance (ohms)	...	...	...	...	45,000

\* $E_a=100$  ;  $E_g=0$ .

#### INTER-ELECTRODE CAPACITIES.

Grid to Anode ( $\mu\mu\text{F}$ )	...	...	...	...	6.0
Grid to Cathode ( $\mu\mu\text{F}$ )	...	...	...	...	4.5
Anode to Cathode ( $\mu\mu\text{F}$ )	...	...	...	...	4.5

#### DIMENSIONS.

Maximum overall length (mm.)	...	...	...	...	105
Maximum diameter (mm.)	...	...	...	...	45

PRICE ~~7/-~~ 5/6

#### GENERAL.

The Mazda H.2 Valve is a high amplification three-electrode valve designed for use in a receiver operating from a 2-volt accumulator.

It has an exceedingly high amplification factor coupled with a very low impedance for this class of valve, and the bulb is metal coated, to assist in eliminating external interference.

A very good feature is that the valve, under normal conditions, is non-microphonic, this being due to the special electrode construction.

Under exceptional conditions, however, where the speaker is mounted very close to the detector valve it may be necessary to use some form of resilient valve holder or the usual form of cotton wool damping on the bulb itself.

With the H.2 a filament rheostat is unnecessary, but may be used if desired.



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**EDISWAN**

# MAZDA

## H.2

### H.F. AMPLIFICATION.

The valve makes a highly efficient H.F. amplifier with aperiodic or neutralised tuned-anode circuits.

### DETECTION.

The valve is suitable for cumulative-grid or anode-bend detection although in the latter method it should be used with resistance-capacity coupling.

When used as a cumulative grid detector, the grid return lead should be connected to the positive end of the filament.

### L.F. AMPLIFICATION.

The valve may be used as an L.F. amplifier with resistance-capacity or transformer coupling. Comparatively low values of anode resistance are required, 150,000 to 350,000 ohms being sufficient. Consequently, uniform amplification, even at high frequencies, is assured. When using the H.2 with transformer coupling the primary impedance of the transformer should be high.

Grid bias is not essential for normal radio reception as the grid current does not start till approximately 0.3 volts positive.

H.2 is metal coated to eliminate external interference and reduce undesirable coupling. The coating is connected to the filament pin No. 3.

