



HL.133

A.C./D.C. MAINS TRIODE

RATING.

Heater Voltage	...	...	...	...	...	...	13.0
Heater Current (Amps.)	...	...	...	...	...	...	0.2
Maximum Anode Voltage	...	...	...	...	...	...	250
*Mutual Conductance (mA/V)	...	...	...	...	...	...	3.4
*Amplification Factor	...	...	...	...	...	...	36
*Anode A.C. Resistance (Ohms)	...	...	...	...	...	...	10,600

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

TYPICAL OPERATION as R.C.C. Amplifier.

H.T. Supply	...	...	...	...	...	165	185
Decoupling Resistance (Ohms)	...	...	...	...	...	10,000	10,000
Anode Load (Ohms)	...	...	...	...	...	50,000	50,000
Anode Current (mA)	...	...	...	...	...	1.3	1.4
Grid Bias (Volts) (Approx.)	...	...	...	...	...	1.95	2.1
Self Bias Resistance (Ohms)	...	...	...	...	...	1,500	1,500
Voltage Amplification	...	...	...	...	...	25.5	26.0
Max. Output Volts RMS for $2\frac{1}{2}\%$ Harmonic Content	...	...	...	...	...	22.0	25.5

INTER-ELECTRODE CAPACITIES.

*Anode to Earth	...	...	...	...	...	5.0 $\mu\mu\text{F}$
*Grid to Earth	...	...	...	...	...	4.0 $\mu\mu\text{F}$
Anode to Grid	...	...	...	...	...	4.75 $\mu\mu\text{F}$

* "Earth" denotes the remaining earthy potential electrodes and metallising joined to cathode.

DIMENSIONS.

Maximum overall length	...	...	...	...	...	105 mm.
Maximum diameter	...	...	...	...	...	32 mm.

GENERAL.

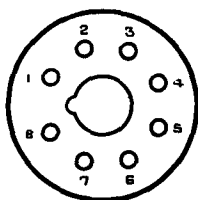
The HL.133 is an indirectly heated triode for use in D.C., A.C./D.C. mains or car radio receivers. The bulb is of small dimensions and metalised. The valve is fitted with a British Octal Base, the connections to which are given overleaf.

APPLICATION.

The HL.133 may be used as an A.F. amplifier either with R.C. or transformer coupling, or as an oscillator where a high μ triode is required. The heater is designed for series operation, the normal current being 0.2 ampere, and it may also be used on a 12-volt battery in a car radio receiver.

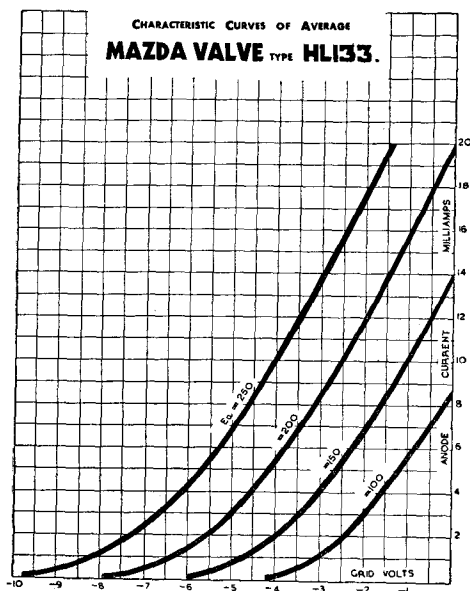


BASING.



- Pin No. 1. Heater.
 2. Cathode.
 3. Anode.
 4. —
 5. —
 6. Metallising.
 7. Omitted.
 8. Heater.
- Top Cap Control Grid.

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.