M A Z D A
12.E.1
BEAM TETRODE
Indirectly heated—for parallel operation
TENTATIVE

GENERAL
The 12.E.1 is intended for use as a series or shunt control valve in stabilised power packs.

RATING
Heater Voltage (volts) \( V_h \)
Heater Current (amps) \( I_h \)
Maximum Anode Voltage (volts) \( V_{a(max)} \)
Maximum Screen Voltage (volts) \( V_{g2(max)} \)
Maximum Control Grid Voltage \( V_{g1(max)} \)
Maximum Voltage between \( g1 \) and \( g2 \) (volts) \( V_{g1-g2} \)
Mutual Conduction (mA/V) \( E_m \)
Maximum Anode Dissipation (watts) \( P_a \)
Maximum Screen Dissipation (watts) \( P_{g2} \)
Maximum Cathode Current (mA) \( I_{k(max)} \)
Maximum Potential Heater/Cathode (volts DC) \( V_{h-k(max)t} \)

- Taken at \( V_a = V_{g2} = 150V_I_a = 200 \text{ mA} \).

| Provided the cathode is positive.

INTER-ELECTRODE CAPACITANCES
Grid/Earth (\( \mu F \)) \( C_{in} \)
Anode/Earth (\( \mu F \)) \( C_{out} \)
Anode/Grid (\( \mu F \)) \( C_{a,g1} \)

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

DIMENSIONS
Maximum Overall Length (mm) 150
Maximum Diameter (mm) 54
Maximum Seated Height (mm) 133
Approximate Net Weight (ozs) 24
Approximate Packed Weight (ozs) 7

MOUNTING POSITION - Vertical
If run horizontally then the axis AB must be on a horizontal plane.
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BULB Clear

TOP CAP American miniature

BASE International Octal (106)

Viewed from free end of pins.

CONNEXIONS

Pin 1 - -
Pin 2 Heater h
Pin 3 - -
Pin 4 Screen Grid g2
Pin 5 Control Grid q1
Pin 6 - -
Pin 7 Heater h
Pin 8 Cathode k
Top Cap Anode a

August 1948
RADIO DIVISION
THE EDISON SWAN ELECTRIC COMPANY LTD
MAZDA
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TENTATIVE AVERAGE CHARACTERISTIC CURVES

Key

--- Anode Current
----- Screen Current

ANODE AND SCREEN CURRENTS IN mA

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MAZDA

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TENTATIVE
AVERAGE CHARACTERISTIC CURVES

Curves taken at Vg2 = 150V.

Key

- Anode Current
- Screen Current

--- Anode and Screen Currents In mA

--- Anode Volts

August 1946

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