

MAZDA

U.404

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HALF WAVE RECTIFIER

Indirectly heated - for series operation

RATING

Heater Current (amps)	I_h	0.1
Heater Voltage (volts)	V_h	40.0
Maximum Anode Voltage (volts RMS)	$V_a(\text{rms})_{\text{max}}$	250
Maximum Peak Inverse Anode Voltage (volts)	P.I.V.(max)	750
Maximum Mean Anode Current (mA)	$I_a(\text{av})_{\text{max}}$	90
Maximum Peak Anode Current (mA)	$I_a(\text{pk})_{\text{max}}$	700
Maximum Peak Potential Heater/Cathode with Heater negative (volts)	$V_{h-k}(\text{max})$	550

DIMENSIONS

Maximum Overall Length (mm)	76
Maximum Diameter (mm)	22
Maximum Seated Height (mm)	63
Radius Over Location Key (mm)	12.25
Approximate Nett Weight (ozs)	$\frac{3}{4}$
Approximate Packed Weight (ozs)	1

MOUNTING POSITION - Unrestricted.

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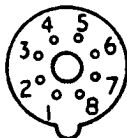
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TYPICAL OPERATION

D.C. Load Current (mA)	70	90
D.C. Rectified Output with 230 volts R.M.S. input	• 248	† 235 • 235
Reservoir Condenser (µF)	16	16
D.C. Voltage drop across rectifier (volts)	8.0	9.5

• Voltage output with 50 ohms limiting resistance in series with rectifier.

† Voltage output with 100 ohms limiting resistance in series with rectifier.

BULB ClearBASE B.8.A.

Viewed from free end of pins

CONNEXIONS

Pin 1	Heater	h
Pin 2	Anode	a
Pin 3	Blank	
Pin 4	Internal Connexion ^b	
Pin 5	Internal Connexion ^b	
Pin 6	Internal Connexion ^b	
Pin 7	Cathode	k
Pin 8	Heater	h

^b "Internal Connexion" indicates that the pin is connected to an electrode for the purpose of improving mechanical rigidity. The connexion may not always be made to the same electrode on a given valve type and it is essential that the corresponding valve holder socket be left unconnected.

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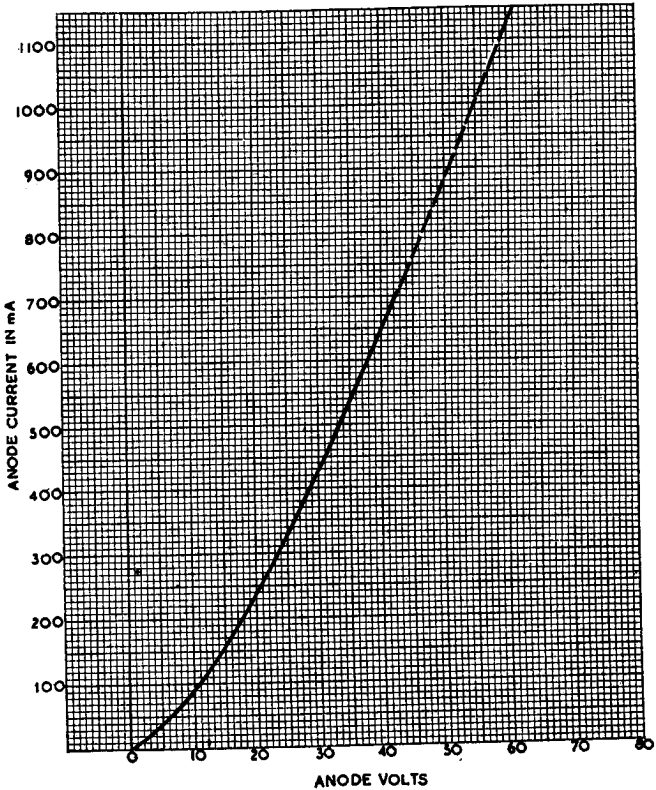
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AVERAGE CHARACTERISTIC CURVE



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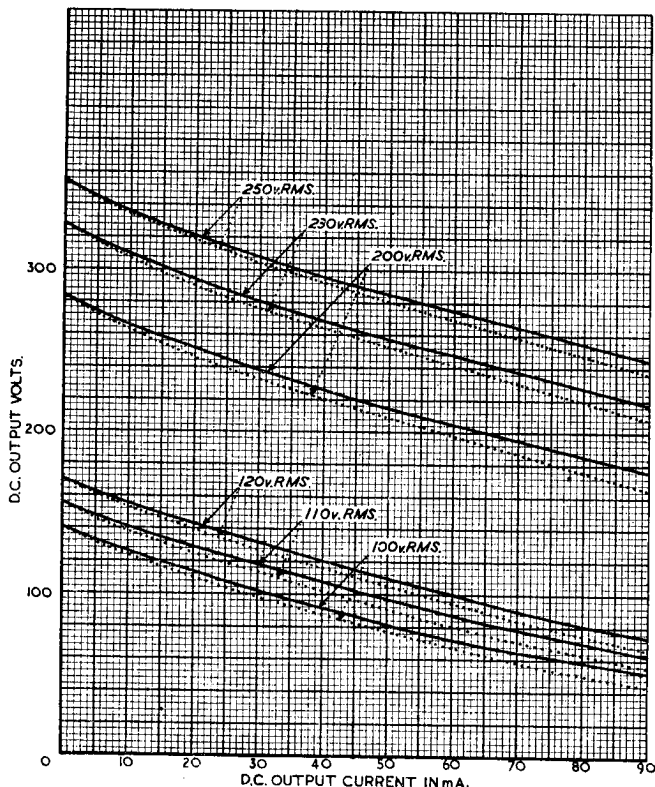
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CHARACTERISTIC CURVES OF AVERAGE MAZDA VALVE U404

HALF WAVE RECTIFICATION REGULATION CHARACTERISTIC

Curves taken with $8\mu\text{F}$ Reservoir Condenser.

Key { ——— no Limiting Resistance in Anode Circuit.
..... 50 Ω Limiting Resistance in Anode Circuit.



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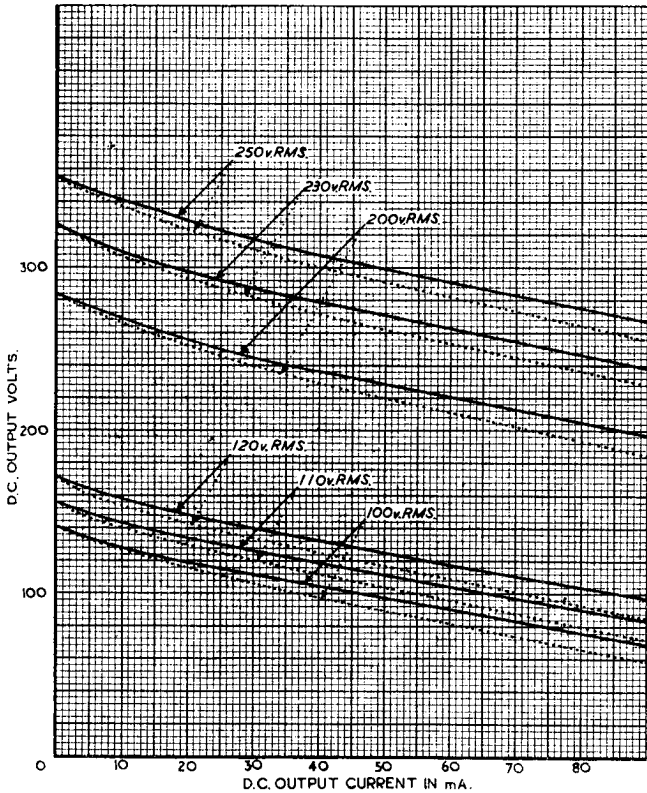
HALF WAVE RECTIFIER Indirectly heated—for series operation

CHARACTERISTIC CURVES OF AVERAGE MAZDA VALVE U404

HALF WAVE RECTIFICATION REGULATION CHARACTERISTIC

Curves taken with 12 μ F Reservoir Condenser.

Key { — no Limiting Resistance in Anode Circuit.
 - - - 50 Ω Limiting Resistance in Anode Circuit.



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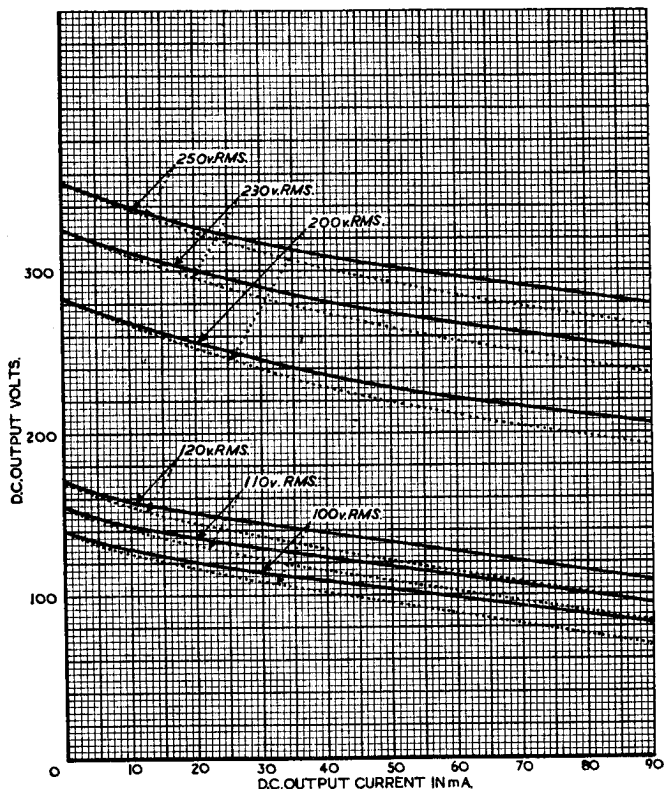
HALF WAVE RECTIFIER
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CHARACTERISTIC CURVES OF AVERAGE MAZDA VALVE U404

HALF WAVE RECTIFICATION REGULATION CHARACTERISTIC

Curves taken with 16 μ F Reservoir Condenser.

Key { — no Limiting Resistance in Anode Circuit.
..... 50 Ω Limiting Resistance in Anode Circuit.



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CHARACTERISTIC CURVES OF AVERAGE MAZDA VALVE U.404

HALF WAVE RECTIFICATION REGULATION CHARACTERISTIC

Curves taken with $32\mu\text{F}$ Reservoir Condenser.

Key { — no Limiting Resistance in Anode Circuit.
..... 22Ω Limiting Resistance in Anode Circuit.

