

# MAZDA

20.P.1

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## TELEVISION BEAM POWER AMPLIFIER

Indirectly heated for AC/DC series operation

### GENERAL

The 20.P.1 has been designed for use in the output stage of a time base for magnetic scanning. The valve has been so designed to stand the high peak anode voltages required by this class of service.

### RATING

Heater Current (amps)	$I_h$	0.2	
Heater Voltage (volts)	$V_h$	38.0	
Maximum Anode Voltage (volts)	$V_a(\text{max})$	400	
Maximum Screen Voltage (volts)	$V_{g2}(\text{max})$	250	
Mutual Conductance (mA/V)	$g_m$	• 7.3	←
Maximum Peak Anode Voltage (Pulse)	$V_a(\text{pk})$	6,000	
Maximum Peak Screen Voltage (Pulse negative)	$V_{g2}(\text{pk})$	2,000	←
Maximum Peak Grid Voltage (Pulse negative)	$V_{g1}$	1,500	
Maximum Anode Dissipation (watts)	$P_a$	15	
Maximum Screen Dissipation (watts)	$P_{g2}$	5	
Maximum Heater/Cathode Volts (RMS)	$V_{h-k}(\text{max})$	•• 250	←
Maximum Cathode Current (mA)		150	

• At  $V_a = V_{g2} = 150$ ;  $I_a = 100\text{mA}$

•• Measured with respect to the higher potential heater pin.

### INTER-ELECTRODE CAPACITANCES

Anode/Earth ( $\mu\text{pF}$ )	$C_{out}$	7.0
Anode/Control Grid ( $\mu\text{pF}$ )	$C_{a,g1}$	0.55
Grid/Earth ( $\mu\text{pF}$ )	$C_{in}$	20.0

### DIMENSIONS

Maximum Overall Length (mm)	142
Maximum Diameter (mm)	54
Maximum Seated Height (mm)	128
Approximate Nett Weight (ozs)	2½
Approximate Packed Weight (ozs)	7

### MOUNTING POSITION - Unrestricted.

If mounted horizontally it is recommended that pins 3 and 7 should be in a vertical plane.

Indicates a change ←

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THE EDISON SWAN ELECTRIC COMPANY LTD.

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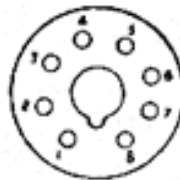
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BULB Clear  
CAP American Miniature  
BASE International Octal (I07)



Viewed from free end of pins

### CONNEXIONS

Pin 1	-	-
Pin 2	Heater	h
Pin 3	-	-
Pin 4	Screen Grid	g <sub>2</sub>
Pin 5	Control Grid	g <sub>1</sub>
Pin 6	Omitted	-
Pin 7	Heater	h
Pin 8	Cathode	k
Top Cap.	Anode	a

NOTE:- In use Pin 1. on holder should be earthed.

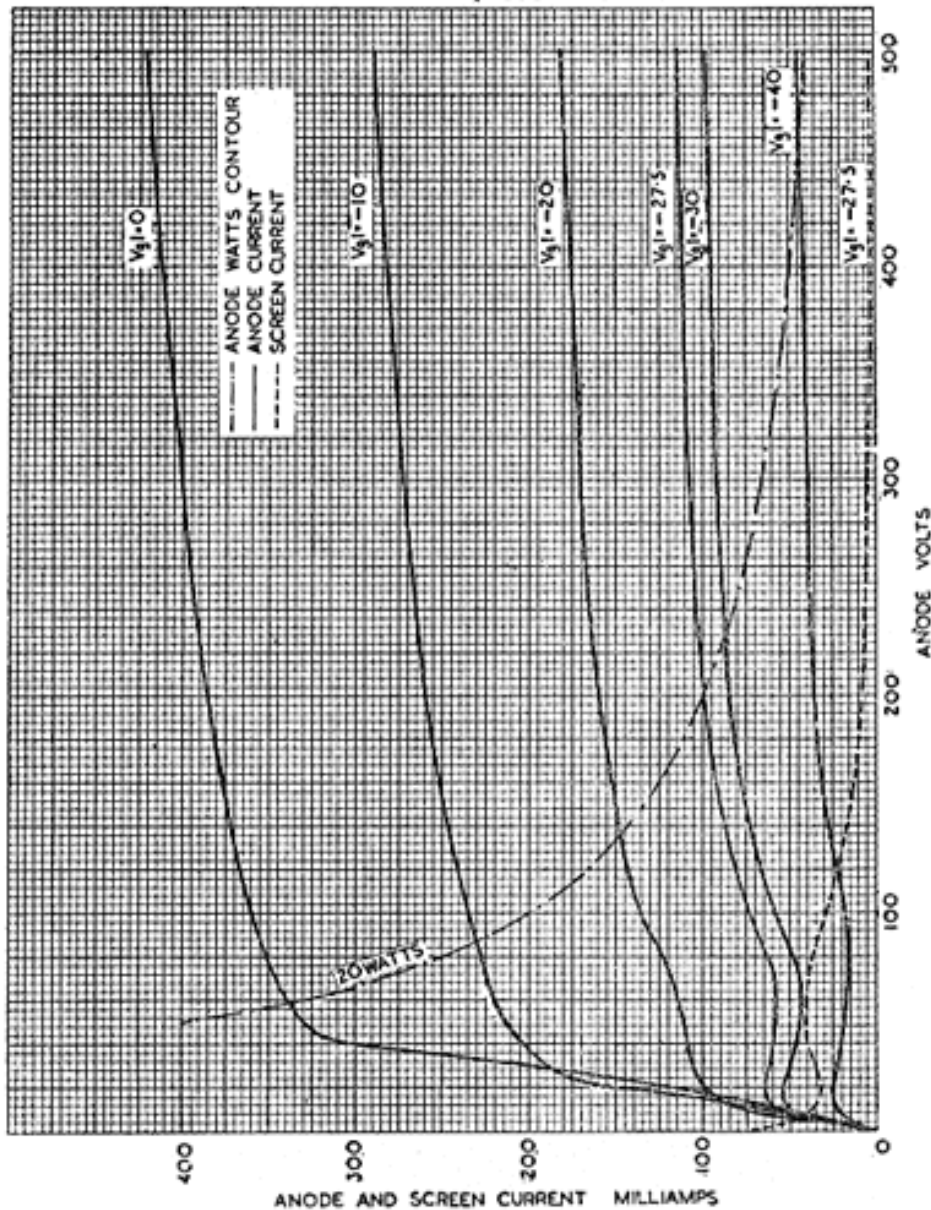
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### AVERAGE CHARACTERISTIC CURVES CURVES TAKEN AT $V_{g2} = 200$



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