MAZDA

11E3

BEAM POWER AMPLIFIER

Indirectly heated—for Pulse Amplification

RATING

Heater Voltage (volts)	V_h	4.2
Heater Current (amps)	I_h	2.5
Maximum Anode Voltage as Series Modulator (volts DC)	$V_{a(max)}$	3,500
Maximum Peak Anode Voltage as Break Modulator (volts)	$V_{a(pk)max}$	12,500
Maximum Screen Voltage (volts)	$V_{g2(max)}$	700
Maximum Control Grid Negative Bias (volts-ve)	$V_{g1(max)}$	-700
Maximum Peak Cathode Current (amps)	$I_{k(pk)max}$	† 3.5
Inner μ	μ_{g1-g2}	‡ 9.0
Maximum Anode Dissipation (watts)	$W_{a(max)}$	10.0
Maximum Screen Dissipation as Series Modulator (watts)	$W_{g2(max)Series}$	0.9
Maximum Screen Dissipation as Break Modulator (watts)	$W_{g2(max)Break}$	2.0
Maximum Potential Heater/Cathode (volts DC)	$V_{h-k(max)}$	150

† Taken under Pulse Conditions of approximately 10 micro-seconds duration and 400:1 minimum off-on ratio.

‡ Taken at V_a = 200; V_{g2} = 200; I_a = 40 mA

INTER-ELECTRODE CAPACITANCES

Anode/Earth ($\mu\mu$F)	C_{out}	7.5
Anode/Control Grid ($\mu\mu$F)	C_{a-g1}	0.26
Control Grid/Earth ($\mu\mu$F)	C_{in}	20

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

DIMENSIONS

Maximum Overall Length (mm)	140
Maximum Diameter (mm)	54
Maximum Seated Height (mm)	125
Approximate Nett Weight (ozs)	2¼
Approximate Packed Weight (ozs)	7

MOUNTING POSITION · Vertical

NOTE

This valve is intended for use as a break or series modulator with a short duration pulse input signal. When the equipment may be subjected to reduced atmospheric pressures the peak voltage between the control grid and Screen grid should not exceed 1,200 volts.

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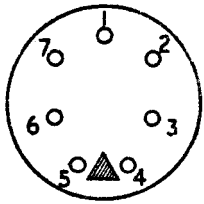
TYPICAL OPERATION		Series Modulator	Break Modulator
Quiescent Anode Voltage (volts)	$V_{a(o)}$	3,500	500
Screen Voltage (volts)	V_{g2}	500	500
Signal Voltage Positive (volts)		50	25
Peak Anode Current (amps)	$I_{a(pk)}$	2	1
Approximate Knee Voltage (volts)		200	
Peak Anode Output Voltage (volts)		3,300	10,000
Approximate Peak Grid Current (amps)	$I_{g1(pk)}$	0.12	0.05

CAP BVA Standard

BULB Clear

BASE British 7 Pin.



Viewed from free end of pins.

CONNEXIONS

Pin 1	Blank	-
Pin 2	Control Grid	g1
Pin 3	Blank	-
Pin 4	Heater	h
Pin 5	Heater	h
Pin 6	Cathode	k
Pin 7	Screen Grid	g2
Top Cap	Anode	a

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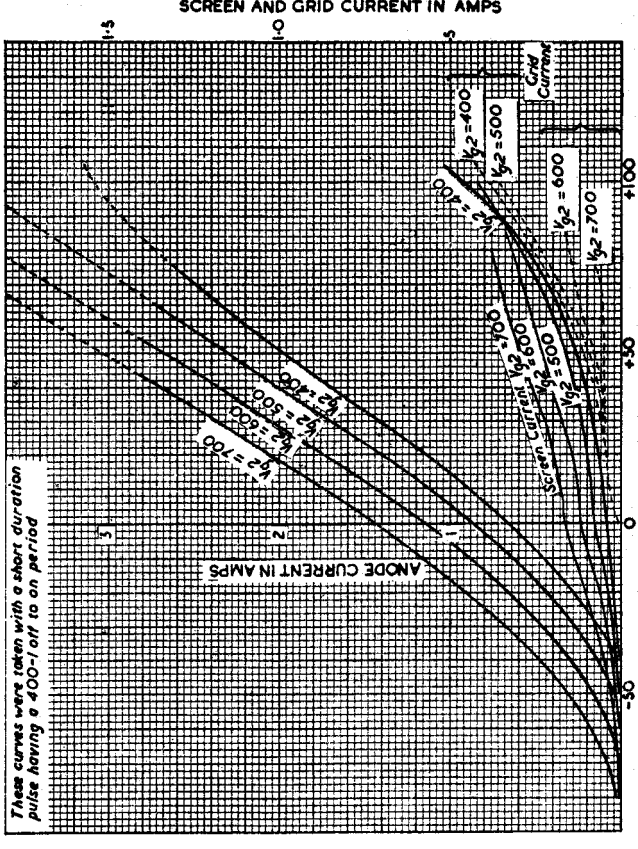
AVERAGE CHARACTERISTIC CURVES

V_b	V_h
1000	4·2



SIEMENS EDISON SWAN LIMITED

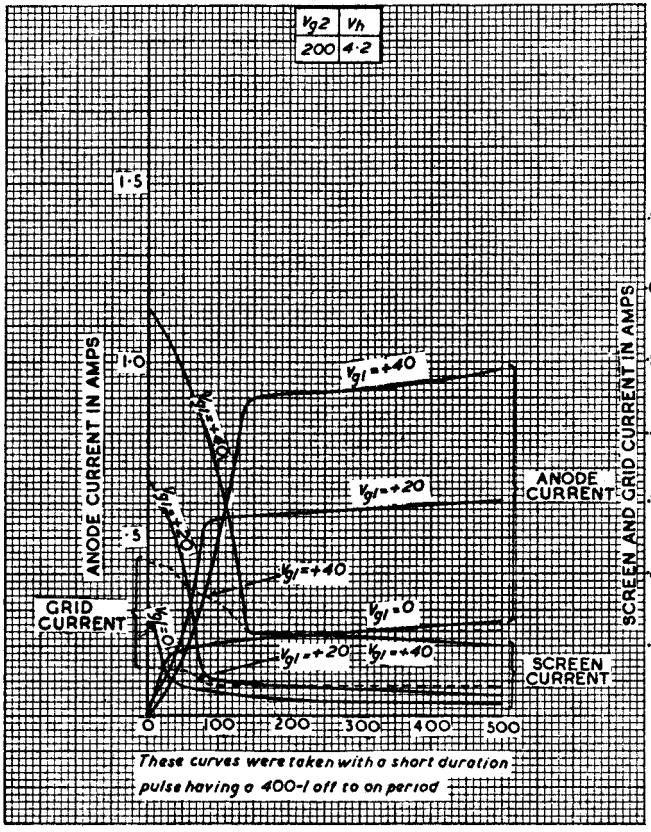
MAZDA

11E3

BEAM POWER AMPLIFIER

Indirectly heated—for Pulse Amplification

AVERAGE CHARACTERISTIC CURVES



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BEAM POWER AMPLIFIER

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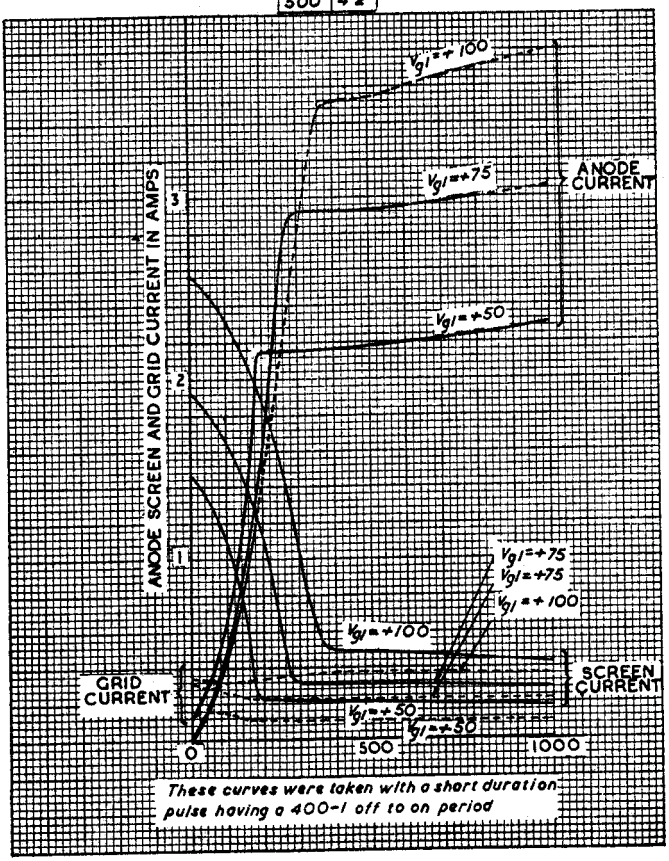
AVERAGE CHARACTERISTIC CURVES

V_{g2}	V_h
500	4·2



THE EDISON SWAN ELECTRIC COMPANY LTD.

MAZDA

IIE3

BEAM POWER AMPLIFIER

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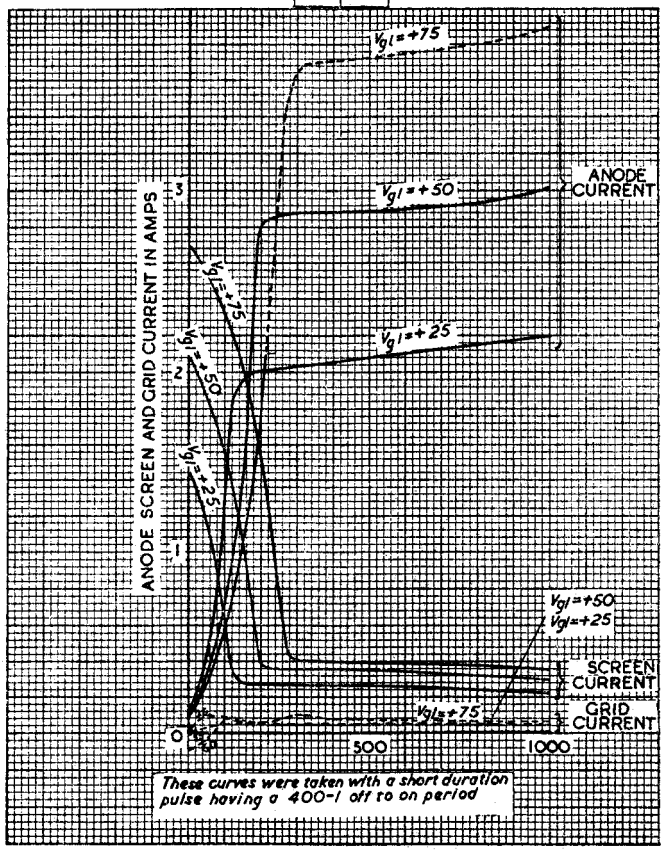
AVERAGE CHARACTERISTIC CURVES

V_{g2}	V_h
700	4·2



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