

EDISWAN**MAZDA****20P4****TELEVISION BEAM POWER AMPLIFIER**

Indirectly heated—for series operation

REPLACEMENT TYPE

20P4

**GENERAL**

The 20P4 has been designed for use in the output stage of a time base for magnetic scanning. The valve has been 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
Maximum Peak Anode Voltage (volts) (pulse positive)	$V_a(\text{pk}) \text{ max}$	6,000
Maximum Peak Screen Voltage (volts) (pulse negative)	$V_{g2}(\text{pk}) \text{ max}$	1,500
Maximum Anode Dissipation (watts)	$P_a(\text{max})$	10.0
Maximum Screen Dissipation (watts)	$P_{g2}(\text{max})$	4
Maximum Heater/Cathode Voltage (volts r.m.s.)	$V_{h-k}(\text{max})$	250†
Maximum Cathode Current (mA)	$I_k(\text{max})$	150
Maximum Grid/Cathode Circuit Resistance ($M\Omega$)	R_{g1}	1.0

* V_a may be increased to 550 where a "recovered voltage" of >200 is available.

† Measured with respect to the higher potential heater pin.

INTER-ELECTRODE CAPACITANCES (pF)

Anode/Earth	C_{out}	10.0
Anode/Control Grid	C_{a-g1}	0.3
Grid/Earth	C_{in}	20.0

Indicates a change



20P4

EDISWAN

MAZDA

20P4**TELEVISION BEAM POWER AMPLIFIER**

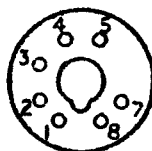
Indirectly heated—for series operation

REPLACEMENT TYPE ←DIMENSIONS

Maximum Overall Length	(mm)	108
Maximum Diameter	(mm)	32
Maximum Seated Height	(mm)	94
Approximate Nett Weight	(ozs)	2½
Approximate Packed Weight (ozs)		7

MOUNTING POSITION—Unrestricted

If mounted horizontally it is recommended that pins 2 and 6 should be in a vertical plane.

BULB—ClearCAP—American Miniature (CT1)BASE—International Octal (107)

Viewed from free end of pins.

CONNECTIONS

Pin 1	No connection	NC
Pin 2	Heater	h
Pin 3	No connection	NC
Pin 4	Screen Grid	g2
Pin 5	Control Grid	g1
Pin 6	No Pin	NP
Pin 7	Heater	h
Pin 8	Cathode	k
Top Cap	Anode	a

Indicates a change ←

February 1959

VALVE & CRT DIVISION

Issue 3/2A

SIEMENS EDISON SWAN LIMITED

EDISWAN

MAZDA

20P4

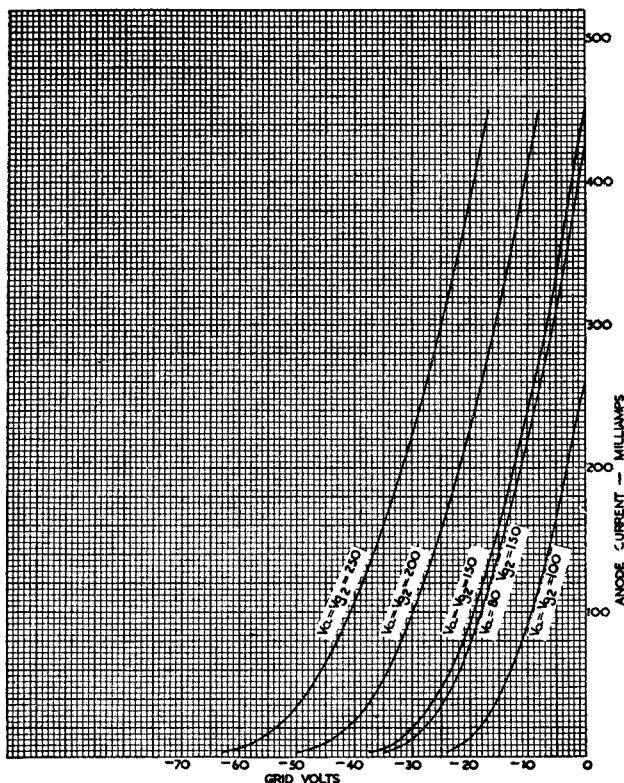
TELEVISION BEAM POWER AMPLIFIER

Indirectly heated—for series operation

REPLACEMENT TYPE

20P4

AVERAGE CHARACTERISTIC CURVES



Indicates a change →

February 1959

VALVE & CRT DIVISION

Issue 2/2A

SIEMENS EDISON SWAN LIMITED

20P4

EDISWAN

MAZDA

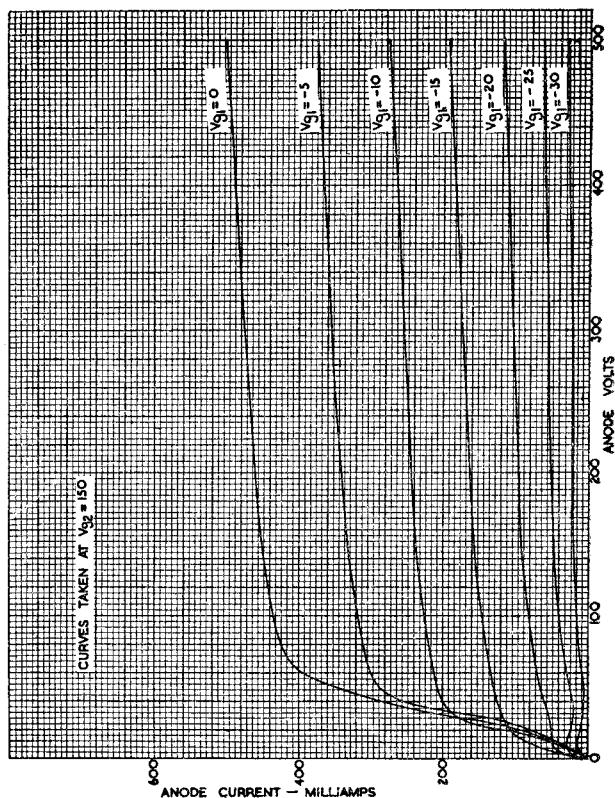
20P4

TELEVISION BEAM POWER AMPLIFIER

Indirectly heated—for series operation

REPLACEMENT TYPE

AVERAGE CHARACTERISTIC CURVES



Indicates a change

February 1959

VALVE & CRT DIVISION

Issue 2/2A

SIEMENS EDISON SWAN LIMITED