

# 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)	$V_a(\max)$	400*
Maximum Screen Voltage (volts)	$V_{g2}(\max)$	250
Maximum Peak Anode Voltage (volts) (pulse positive)	$V_a(\text{pk}) \max$	6,000
Maximum Peak Screen Voltage (volts) (pulse negative)	$V_{g2}(\text{pk}) \max$	1,500
Maximum Anode Dissipation (watts)	$P_a(\max)$	10.0
Maximum Screen Dissipation (watts)	$P_{g2}(\max)$	4
Maximum Heater/Cathode Voltage (volts r.m.s.)	$V_{h-k}(\max)$	250†
Maximum Cathode Current (mA)	$I_k(\max)$	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

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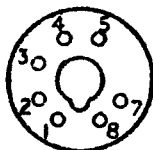
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**REPLACEMENT TYPE** ←DIMENSIONS

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 (I07)

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

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February 1959

VALVE &amp; CRT DIVISION

Issue 3/2A

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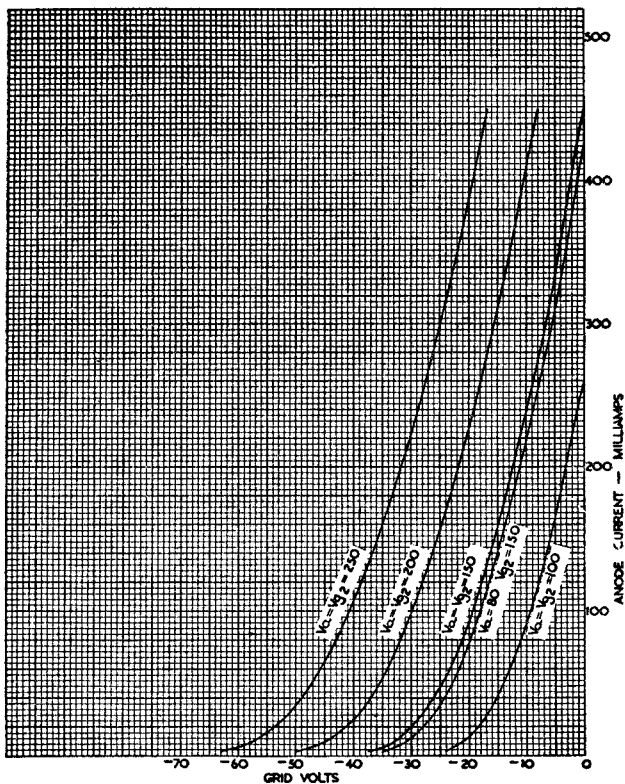
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#### AVERAGE CHARACTERISTIC CURVES



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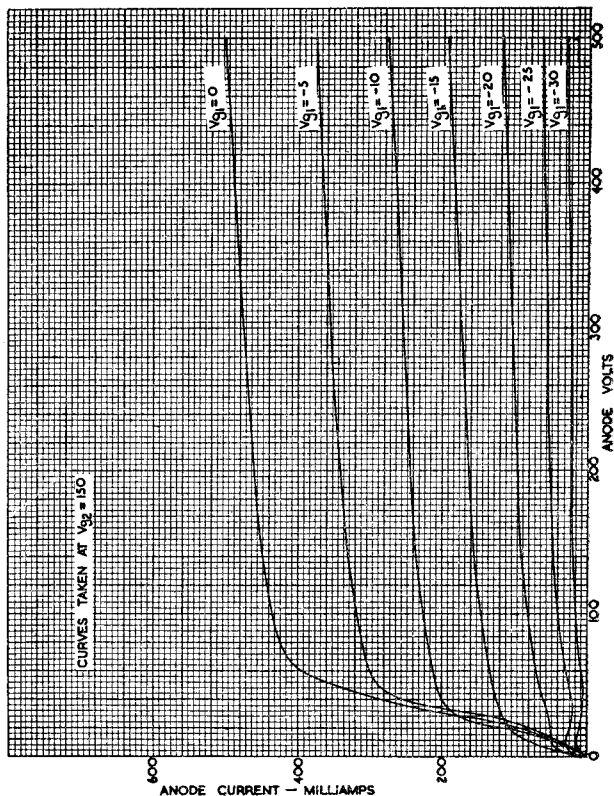
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