MAZDA

6 F 32

6F32

SCREENED R.F. PENTODE

Indirectly heated—for parallel operation

REPLACEMENT TYPE ←

GENERAL

The 6 F 32 has a short cut off Suppressor Grid characteristic which makes it particularly suitable for use in Modulator, Variable Reactance and Timing Circuits.

RATING

Heater Voltage (volts)	V_h	6.3
Heater Current (amps)	I_h	0.63
Maximum Anode Voltage (volts)	$V_{a(max)}$	250
Maximum Screen Voltage (volts)	$V_{g2(max)}$	200
Mutual Conductance (mA/V)	g_m	* 3.35
Inner μ ¶	μ_{g1-g2}	* 38
Maximum Anode Dissipation (watts)	$P_{a(max)}$	† 4.5
Maximum Screen Dissipation (watts)	$P_{g2(max)}$	1.5
Maximum Potential Heater/Cathode (volts DC)	$V_{h-k(max)}$	150

* Taken at $V_a = V_{g2} = 200v$; $V_{g1} = -4v$; $V_{g3} = 0v$.

¶ i.e. $\dfrac{\delta V_{g2}}{\delta V_{g1}}$ with I_a constant

† Low grid resistance should be employed, particularly when running at maximum dissipation.

INTER-ELECTRODE CAPACITANCES

Anode/Earth (μμF)	C_{out}	5.7
Anode/Control Grid (μμF)	C_{a-g1}	< 0.0005
Control Grid/Earth (μμF)	C_{in}	10.5

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

DIMENSIONS

Maximum Overall Length (mm)	96
Maximum Diameter (mm)	32
Maximum Seated Height (mm)	83.5
Approximate Nett Weight (ozs)	1¼
Approximate Packed Weight (ozs)	1¾

MOUNTING POSITION - Unrestricted

Indicates a change ←

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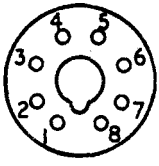
TYPICAL OPERATION

Anode Voltage (volts)	V_a	200	200
Screen Voltage (volts)	V_{g2}	200	200
Control Grid Bias Voltage (volts)	V_{g1}	-4.5	-4.5
Suppressor Grid Bias Voltage (volts)	V_{g3}	0	-3.3
Anode Current (mA)	I_a	5.1	2.5
Screen Current (mA)	I_{g2}	3.45	5.5
Mutual Conductance (mA/V	g_m	3.0	1.4
Approximate Suppressor Grid Bias (volts) for 50 µA/V with V_{g1} = -4.5v		-8.0	-8.0

BULB Metallised

BASE B.O.7



Viewed from free ends of pins

CAP B.V.A. Standard

CONNECTIONS

Pin 1	Heater	h
Pin 2	Cathode	k
Pin 3	Anode	a
Pin 4	Screen Grid	g2
Pin 5	Suppressor Grid	g3
Pin 6	Metallising	M
Pin 7	Omitted	-
Pin 8	Heater	h
Top Cap	Control Grid	g1

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EDISWAN
MAZDA
6F32

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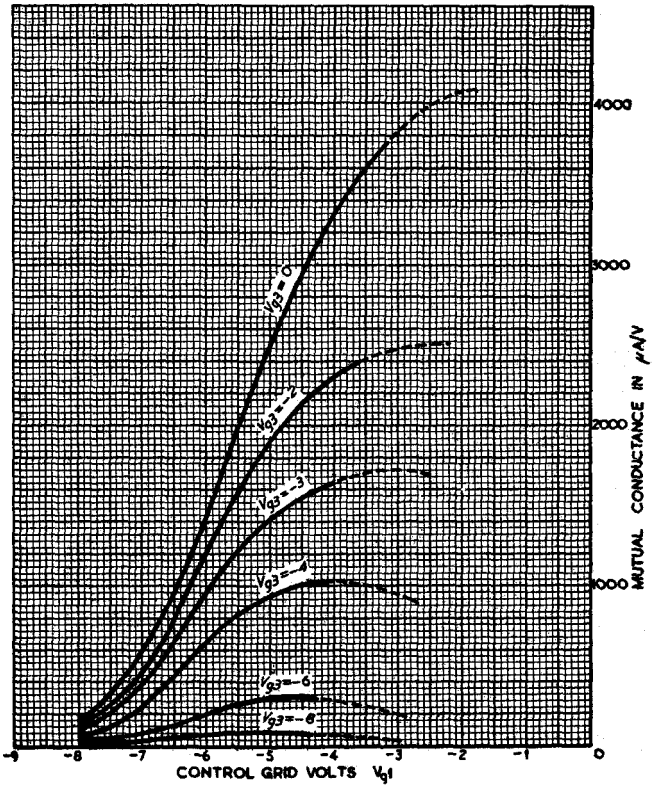
Replacement Type ←

AVERAGE CHARACTERISTIC CURVES

Curves taken at $V_a = V_{g2} = 200V$.

Where the curve is broken a dissipation limit is exceeded.



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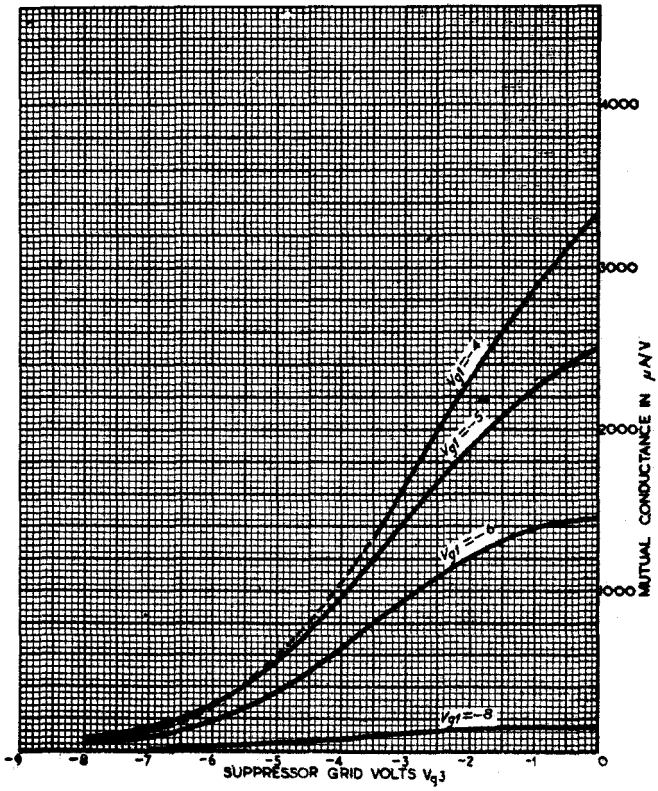
Replacement Type ←

AVERAGE CHARACTERISTIC CURVES

Curves taken at $V_b = V_{g2} = 200V$.
Where the curve is broken a dissipation limit is exceeded.



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SIEMENS EDISON SWAN LIMITED

EDISWAN

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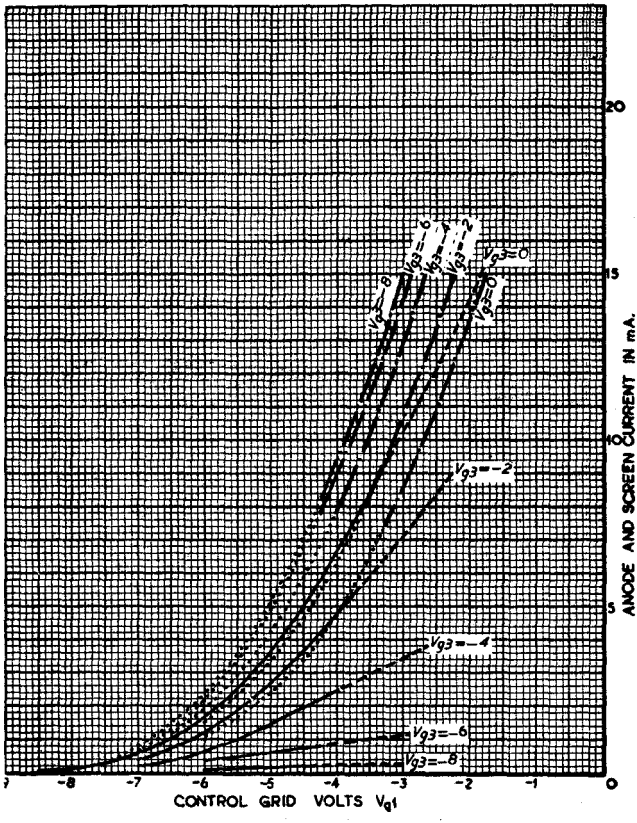
Replacement Type

AVERAGE CHARACTERISTIC CURVES

Curves taken at $V_a = V_{g2} = 200V$

Key
- ——— Anode Current
- ····· Screen Current
- - - - Anode Current
- —·—·— Screen Current

} *In these regions a dissipation limit is exceeded*



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AVERAGE CHARACTERISTIC CURVES
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Key:
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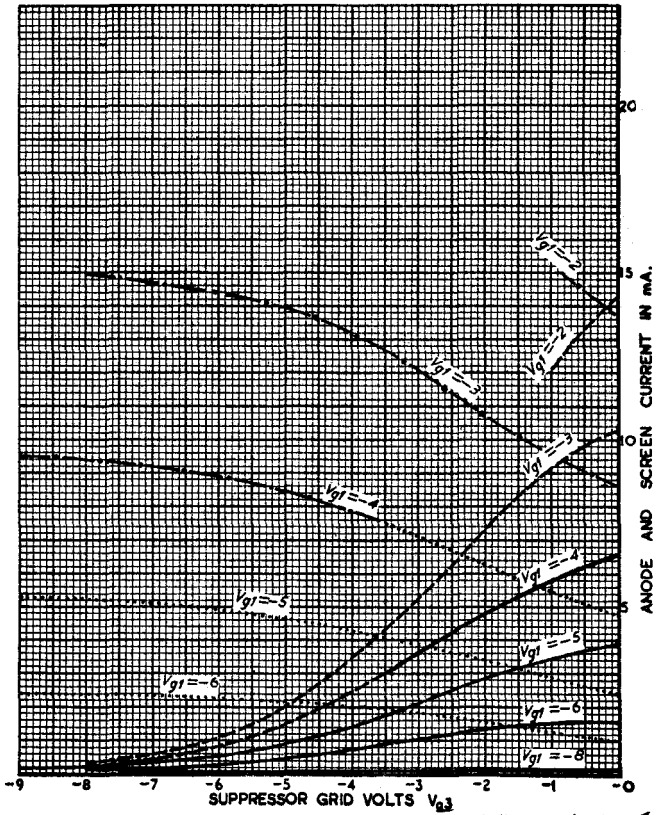
- ····· Screen Current
- — — Anode Current
- —·— Screen Current

} *In these regions a dissipation limit is exceeded.*



Indicates a change ←