6.F.32

MAZDA

6.F.32

SCREENED R.F. PENTODE

Indirectly heated – for parallel operation

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 ¶	$\mu_{g1-\mu g2}$	• 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. $\frac{\delta V_{g2}}{\delta V_{g1}}$ 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

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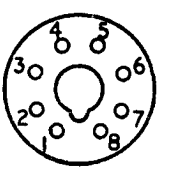
TYPICAL OPERATION

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	S_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.0.7



Viewed from free ends of pins

CAP B.V.A. Standard

CONNEXIONS

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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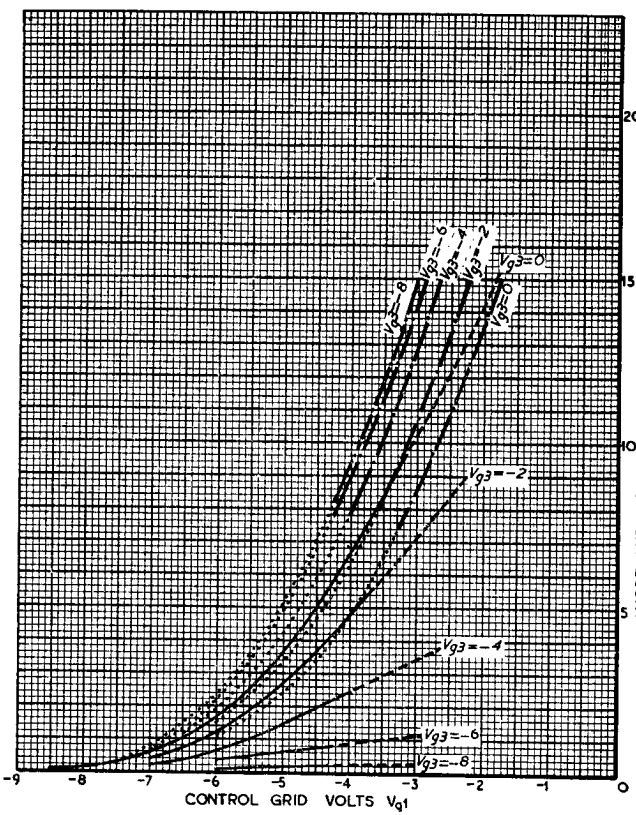
CHARACTERISTIC CURVES OF AVERAGE

MAZDA VALVE 6F32

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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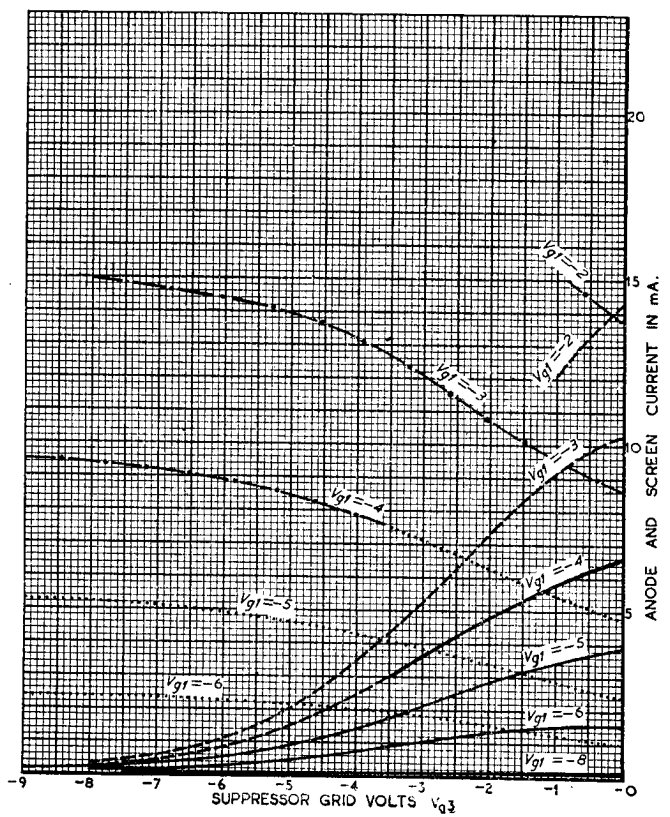
CHARACTERISTIC CURVES OF AVERAGE

MAZDA VALVE 6F 32

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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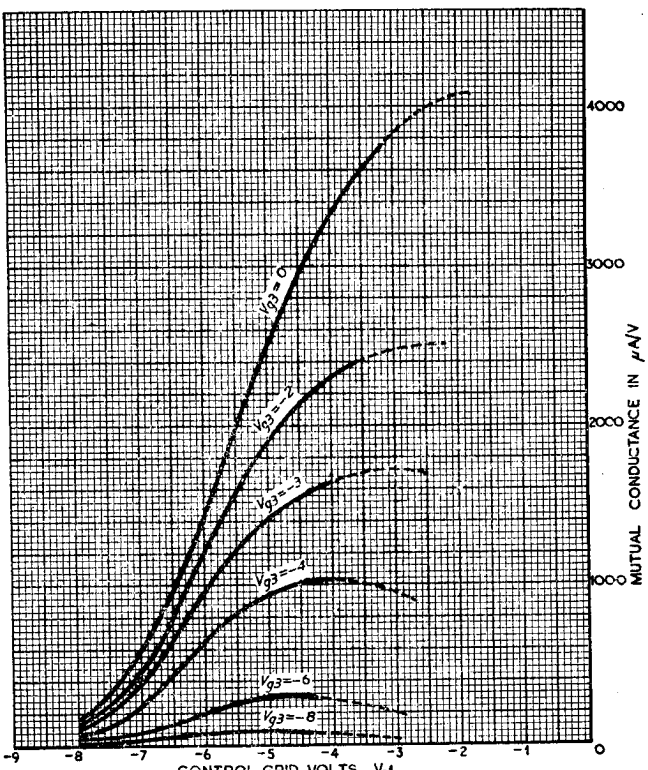
CHARACTERISTIC CURVES OF AVERAGE

MAZDA VALVE 6F32

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

Where the curve is broken a dissipation limit is exceeded.



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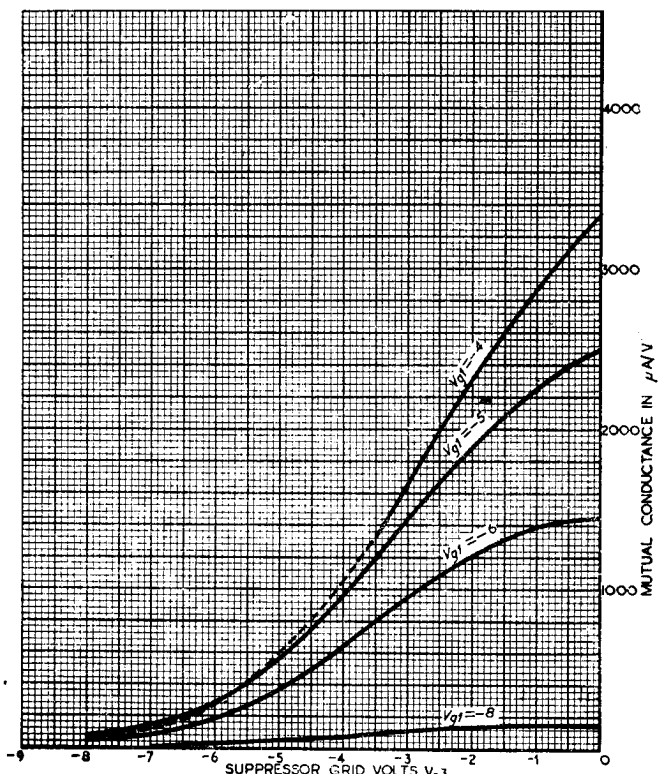
CHARACTERISTIC CURVES OF AVERAGE

MAZDA VALVE 6F32

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

Where the curve is broken a dissipation limit is exceeded.



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