

MAZDA

6.F.32

SCREENED R.F. PENTODE

Indirectly heated - for parallel operation

6.F.32

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

$$\text{† i.e. } \frac{\delta V_{g2}}{\delta V_{g1}} \quad \text{with } I_a \text{ constant}$$

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

INTER-ELECTRODE CAPACITANCES

Anode/Earth (μF)	C_{out}	5.7
Anode/Control Grid (μF)	C_{a-g1}	< 0.0005
Control Grid/Earth (μF)	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)	1½
Approximate Packed Weight (ozs)	1½

MOUNTING POSITION - Unrestricted

MAZDA

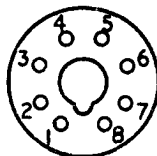
6.F.32

SCREENED R.F. PENTODE

Indirectly heated - for parallel operation

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	μ_m	3.0	1.4
Approximate Suppressor Grid Bias (volts) for 50 $\mu A/V$ with $V_{g1} = -4.5V$		-8.0	-8.0

BULB MetallisedBASE B.O.7

Viewed from free ends of pins

CAP B.V.A. StandardCONNEXIONS

Pin 1	Heater	h
Pin 2	Cathode	k
Pin 3	Anode	a
Pin 4	Screen Grid	g_2
Pin 5	Suppressor Grid	g_3
Pin 6	Metallising	M
Pin 7	Omitted	-
Pin 8	Heater	h
Top Cap	Control Grid	g_1

MAZDA

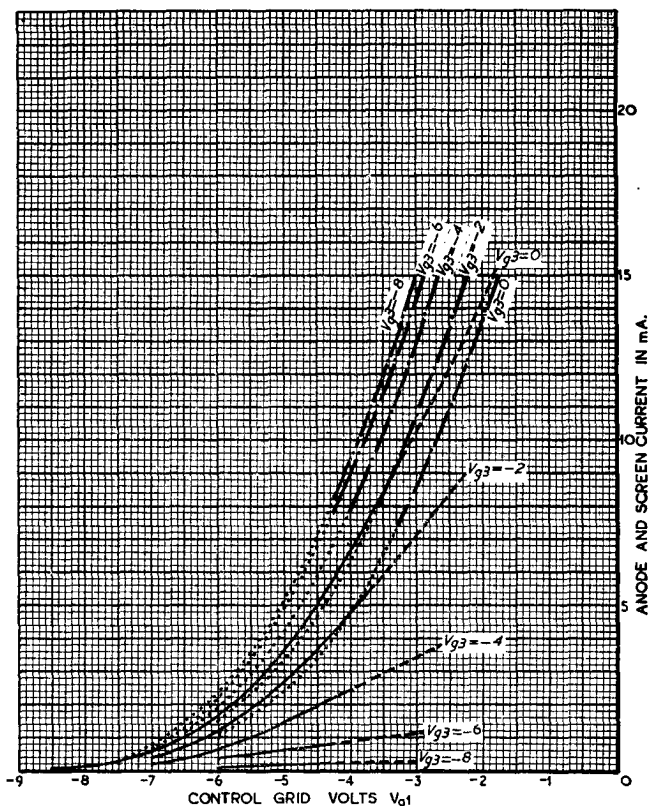
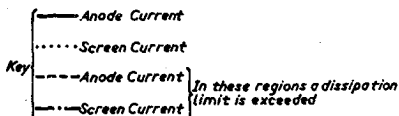
6.F.32

SCREENED R.F. PENTODE

Indirectly heated—for parallel operation

**CHARACTERISTIC CURVES OF AVERAGE
MAZDA VALVE 6F32**

Curves taken at $V_b = V_{c2} = 200V$



6.F.32

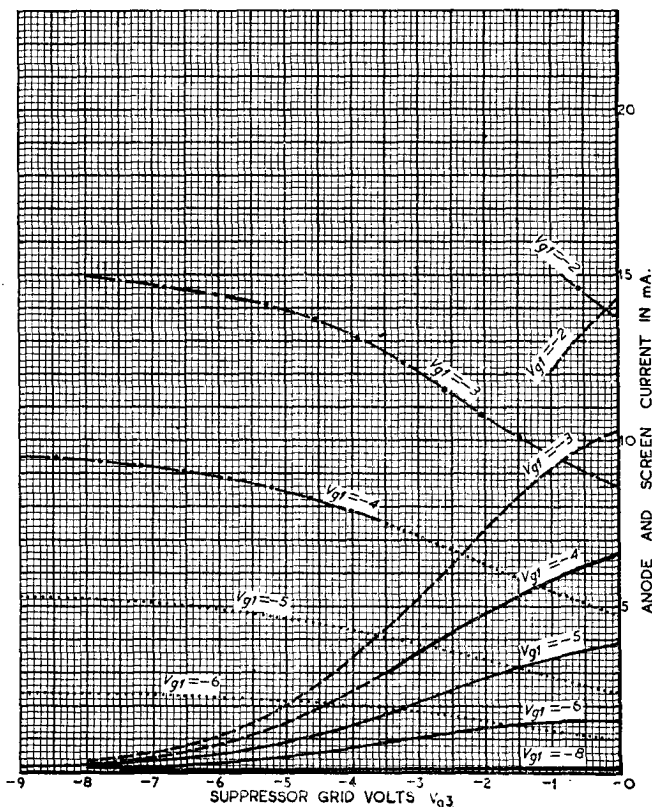
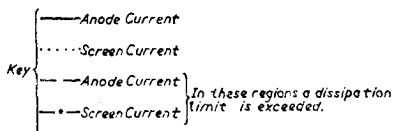
MAZDA

6.F.32

SCREENED R.F. PENTODE

Indirectly heated—for parallel operation

CHARACTERISTIC CURVES OF AVERAGE

MAZDA VALVE 6F32Curves taken at $V_b = V_{b2} = 200V$ 

MAZDA

6.F.32

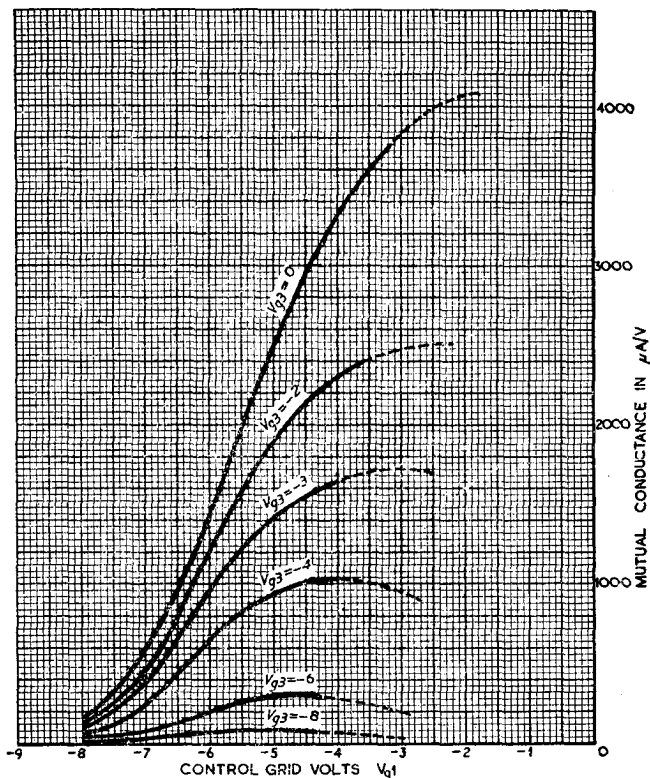
SCREENED R.F. PENTODE

Indirectly heated — for parallel operation

CHARACTERISTIC CURVES OF AVERAGE
MAZDA VALVE 6F32

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

Where the curve is broken a dissipation limit is exceeded.



6.F.32

MAZDA

6.F.32

SCREENED R.F. PENTODE
Indirectly heated — for parallel operation

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.

