

MAZDA**6.F.33****SCREENED R.F. PENTODE.****Indirectly heated**

6.F.33

GENERAL

The 6.F.33 has a short cut-off Suppressor Grid characteristic which makes it particularly suitable for use in Modulator, Variable Reactance and Timing Circuits. In order that the Suppressor Grid may be driven positive, a diode has been tied to this grid.

RATING

Heater Voltage (volts)	V_h	6.3
Heater Current (amps)	I_h	0.35
Maximum Anode Voltage (volts)	$V_a(\text{max})$	250
Maximum Screen Voltage (volts)	$V_{g2}(\text{max})$	250
Mutual Conductance (mA/V)	S_m	* 4.35
Inner μ	μ_{g1g2}	* 38
Maximum Anode Dissipation (watts)	$P_a(\text{max})$	2.5
Maximum Screen Dissipation (watts)	P_{g2}	0.8
Maximum Potential Heater/Cathode (volts DC)	$V_{h-k}(\text{max})$	100

* Taken at $V_a = 200$ v; $V_{g2} = 100$ v;
 $V_{g1} = -1.5$ v; $V_{g3} = 0$ v.

$$\textcircled{a} \text{ i.e. } \frac{\partial V_{g2}}{\partial V_{g1}} \text{ with } I_a \text{ constant}$$

INTER-ELECTRODE CAPACITANCES

	$\dagger$	$\dagger$
Anode/Earth (μF)	C_{out}	4.5
Anode/Control Grid (μF)	C_{a-g1}	0.01
Control Grid/Earth (μF)	C_{in}	7.3
		5.7
		0.012
		8.5

$\dagger$ Measured with Benjamin cylindrical screen type 75/832, but holder capacity balanced out.

$\dagger$ Including capacity of Benjamin E7G holder type 75/833 and screen type 75/832.

DIMENSIONS

Maximum Overall Length (mm)	54
Maximum Diameter (mm)	19
Maximum Seated Height (mm)	48.6
Approximate Nett Weight (ozs)	$\frac{1}{2}$
Approximate Packed Weight (ozs)	$\frac{3}{4}$

MOUNTING POSITION - Unrestricted

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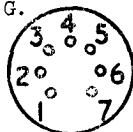
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BULB Clear

BASE B.7.G.



Viewed from free end of pins.

CONNEXIONS

Pin 1	Control Grid	g1
Pin 2	Cathode	k
Pin 3	Heater	h
Pin 4	Heater	h
Pin 5	Anode	a
Pin 6	Suppressor Grid	g3
Pin 7	Screen Grid	g2

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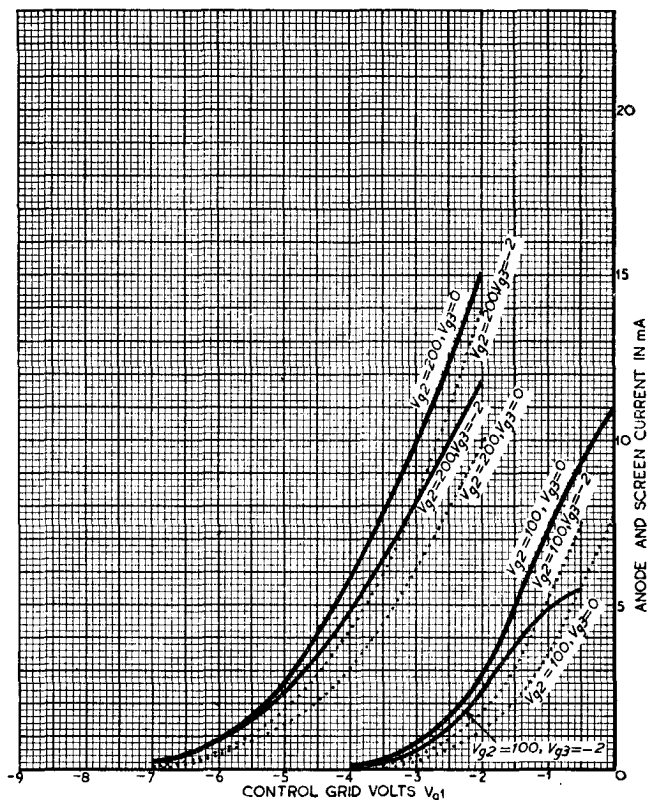
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CHARACTERISTIC CURVES OF AVERAGE MAZDA VALVE 6F33

Curves taken at $V_g = 200V$.

Key { — Anode Current
..... Screen Current



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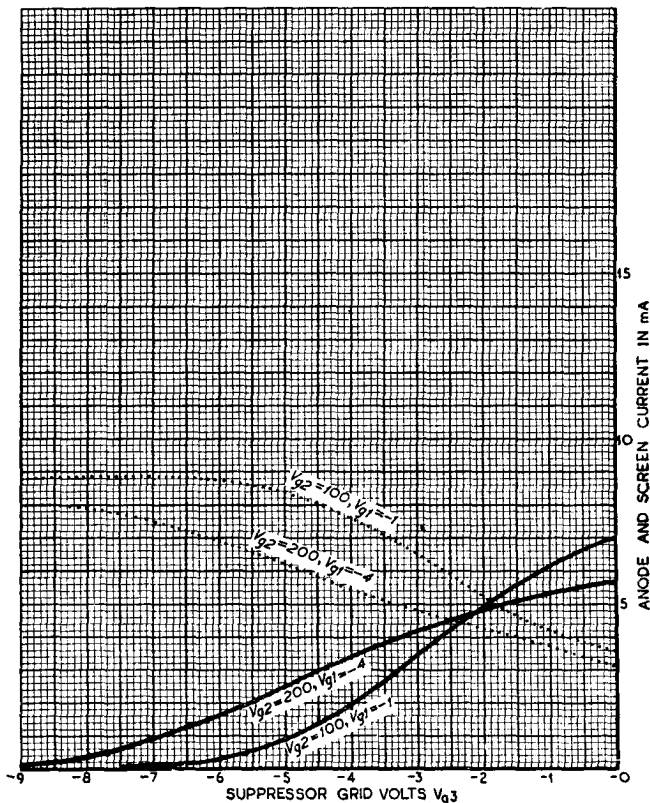
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CHARACTERISTIC CURVES OF AVERAGE

MAZDA VALVE 6F33

Curves taken at $V_b = 200V$.

Key { — Anode Current
..... Screen Current



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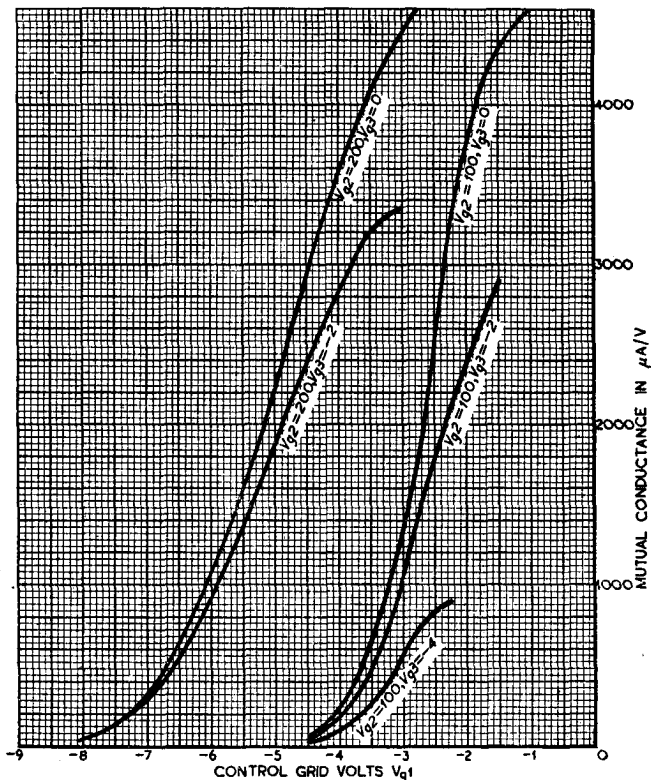
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MAZDA VALVE 6F33**

Curves taken at $V_g = 200V$.



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MAZDA VALVE 6F33

Curves taken at $V_g = 200V$

