

Mazda Radio Valve Engineering Dept.

Siemens Edison Swan Limited, Gasos Works, Brimsdown, Enfield, Middlesex.

CHIEF ENGINEER'S OFFICE.

DATE 18th February, 1959.

SUBJECT

T.D.S. No. 2-V845B-01A

TENTATIVE.

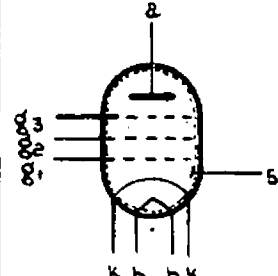
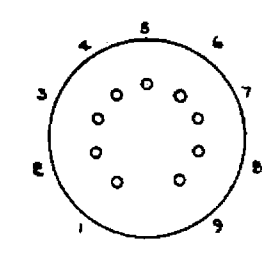
VALVE TYPE 6F23

DIMENSIONS			M.M.	TYPE	Screened H.F. Pentode.
OVERALL LENGTH	MAX.		67.5	CATHODE	Indirectly Heated.
DIAMETER	MAX.		22.2	USE	AC Mains or AC/DC Mains.
SEATED HEIGHT	MAX.		60.5		

RATING

Heater Volts		6.3	NOTE
Heater Current	(amps)	0.3	
Maximum Anode Volts		250	
Maximum Screen Volts		250	
Mutual Conductance	(mA/V)	9.2	A
Inner Amplification Factor (g_1 to g_2)		64	A
Maximum Anode Watts.		3	B
Maximum Screen Watts		1	B
Maximum Heater to Cathode Volts	(RMS)	200	C
Maximum Resistance Control Grid to Cathode	(ohms)	600,000	D

American Base E9-1. Bulb T6 1/2

CAPACITANCES μmF				BASING		BASE. B.9.A. (NOVAL)	CAP.
	\$	*	**	PIN	ELECTRODE		
g_1 -E	9.0	9.0	10.0	1	k		
a-E	3.7	4.0	5.0	2	g_1		
g_1 -a	0.007	0.008	0.009	3	k		
				4	h		
				5	h		
				6	b		
				7	a		
				8	g_2		
				9	g_3		

MOUNTING POSITION: Unrestricted.

Basing 9AQ

TYPICAL OPERATION.

Anode Volts.....	170
Screen Volts.....	170
Self Bias Resistance.....(ohms).....	150
Grid Bias Volts.....(Approx).....	-1.9
Anode Current.....(mA).....	10
Screen Current.....(mA).....	2.6
Mutual Conductance.....(mA/V).....	9.2
Equivalent Grid Noise Resistance.....(ohms)	670
Input Loss at 38 Mc/s $\dagger$(ohms)	8,500
Input Capacity working $\dagger$(μmF) Note E.	12.1
Change in Input Capacity produced by biasing valve to cut-off. (μmF) (Note E)	2.45

NOTES. $\dagger$ The two cathodes strapped and joined directly to earth.A. At $V_a = V_{g2} = 170$. $I_a = 10\text{mA}$.

B. With a grid cathode resistance not exceeding 10,000ohms.

C. From cathode to higher potential heater pin.

D. With maximum anode dissipation = 2watts; maximum screen dissipation = 0.5 watts.
Assuming a common anode and screen decoupling resistance of not less than $2200 \pm 10\%$

E. Hot capacity measurements taken at a frequency of 38 Mc/s.

* Interelectrode capacities with holder capacity balanced out.

** Total interelectrode capacity including B9A ceramic holder with-out skirt or
radial shield (Plessey holder type CP180014/1)

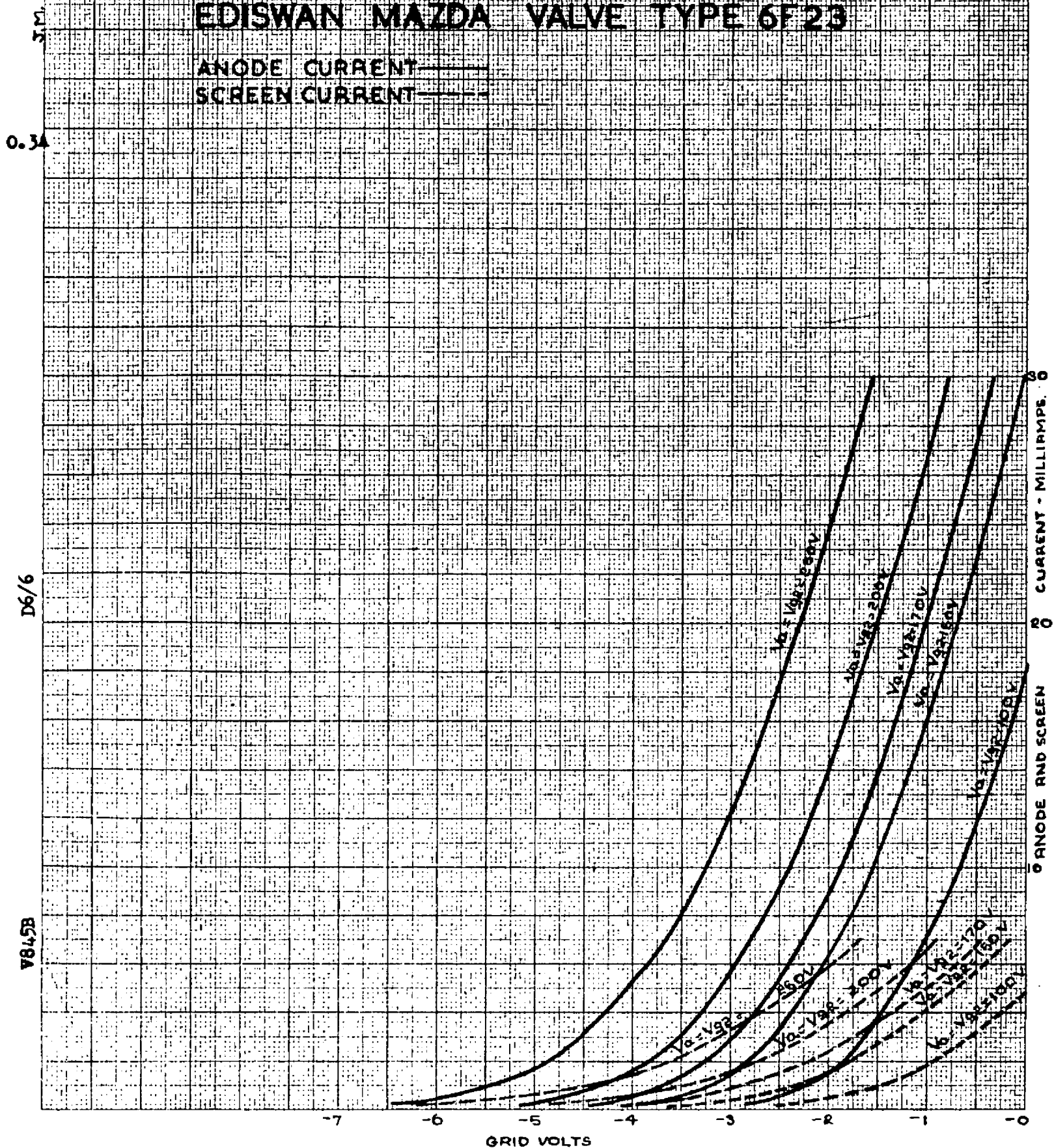
\$ Interelectrode capacities in fully shielded jig, without can

INDICATES A CHANGE SINCE PREVIOUS ISSUE.

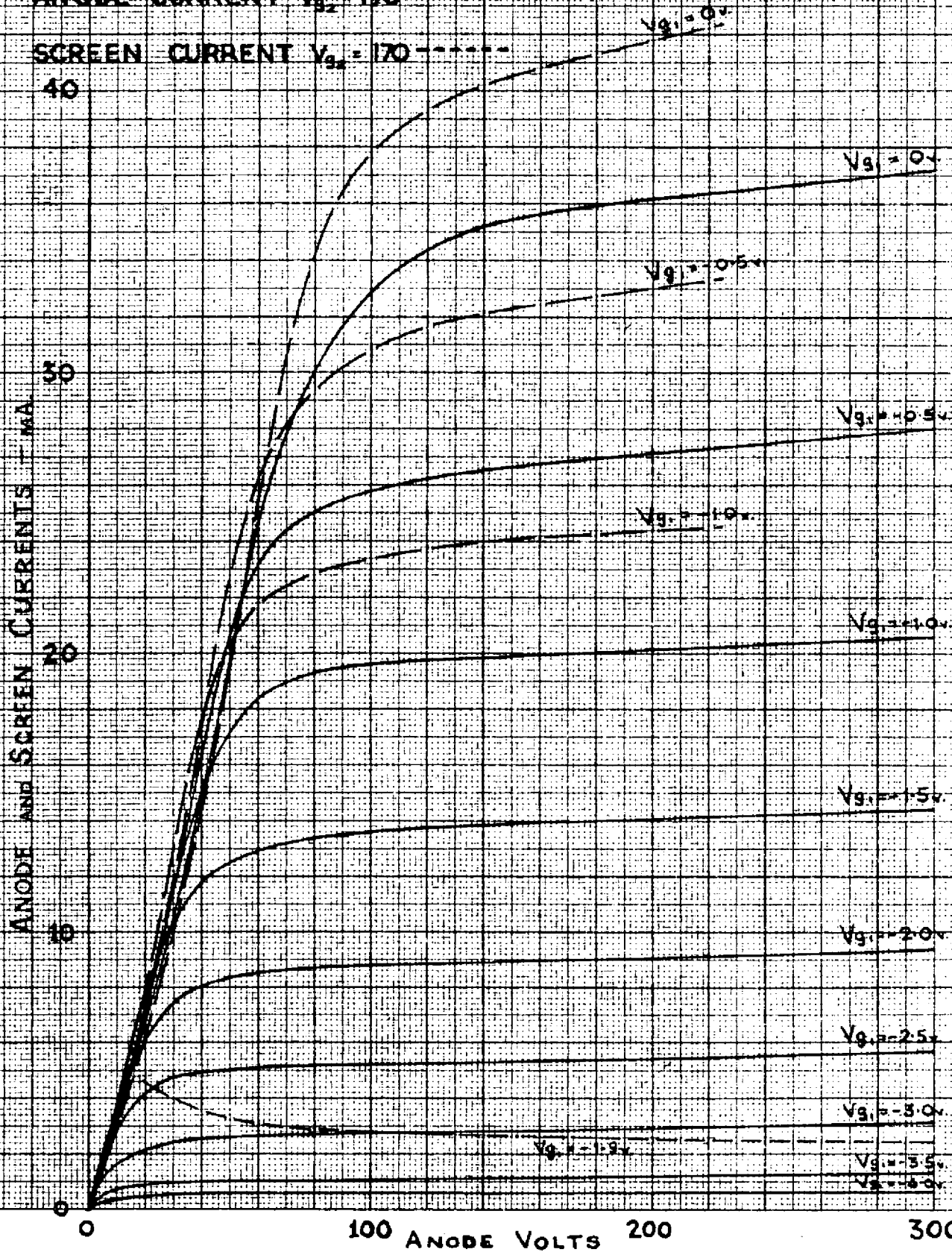
TDS 2-Y845B-101-1

TENTATIVE CHARACTERISTIC CURVES OF EDISWAN MAZDA VALVE TYPE 6F23

ANODE CURRENT ———
SCREEN CURRENT - - -



TENTATIVE CHARACTERISTIC CURVES OF EDISWAN MAZDA VALVE TYPE 6F23

ANODE CURRENT $V_{g_2} = 170$ ———ANODE CURRENT $V_{g_2} = 190$ - - -SCREEN CURRENT $V_{g_2} = 170$ - - - - -

4233 VENTS