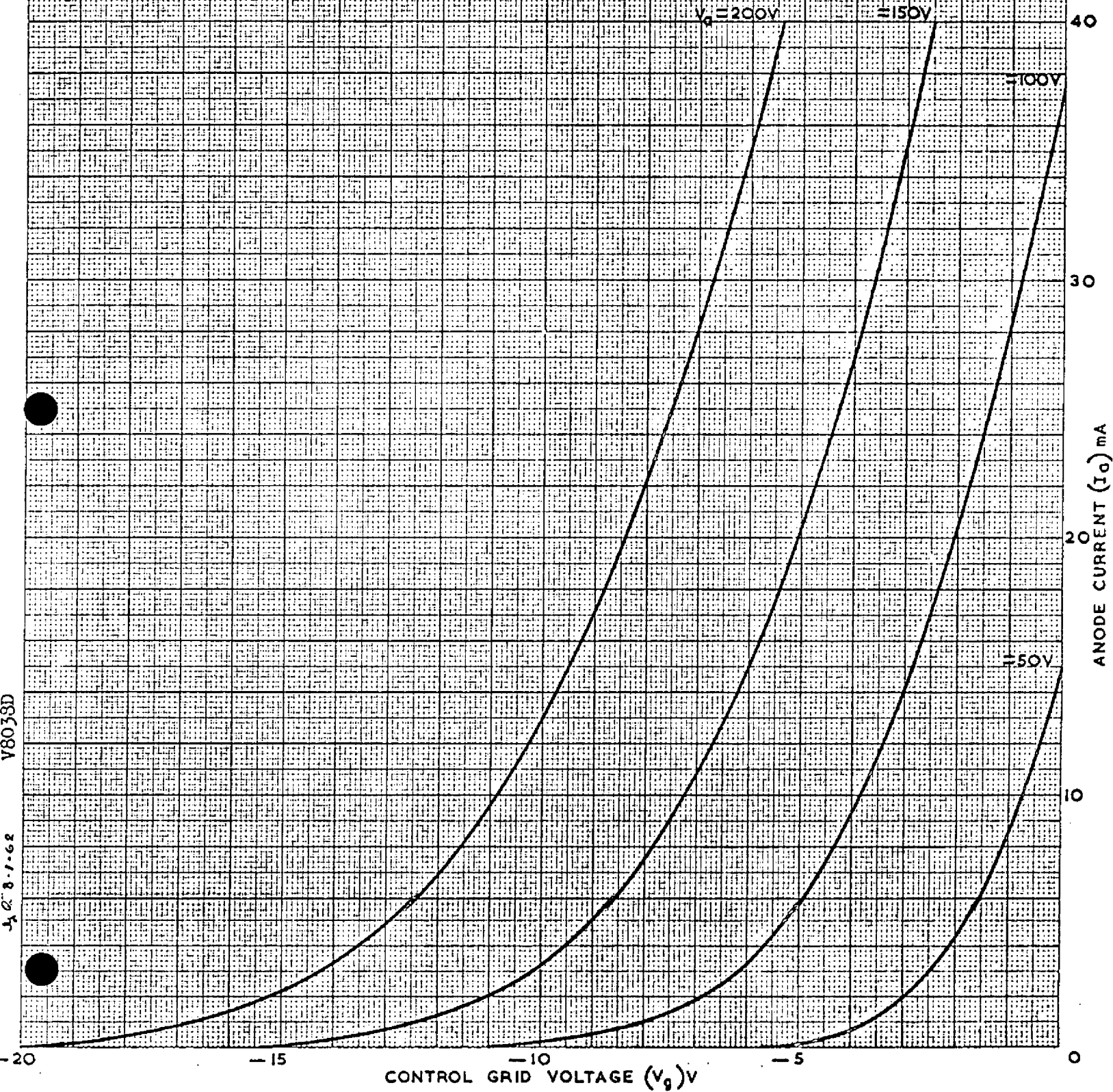


7GV7/ 6GV7		GENERAL	V.H.F. TRIODE PENTODE
This triode and variable mu pentode valve combination, with the pentode of frame grid construction, is for use in television tuners. It is primarily intended to be used as a variable gain V.H.F. frequency changer with the triode as local oscillator but the pentode is also designed for use as a high gain controlled I.F. amplifier following a U.H.F. tuner.			
Heater Current	I_h 0.3 A	RATINGS	Heater Voltage V_h 7.4 V
Maximum Anode Dissipation	$P_a(\max)$	Pentode	Triode
Maximum Screen Grid Dissipation	$P_{g2}(\max)$	2.0	2 W
Maximum Anode Voltage	$V_a(\max)$	0.5	- W
Maximum Screen Grid Voltage	$V_{g2}(\max)$	250	250 V
Maximum Heater to Cathode Voltage (RMS)	$V_{h-k(r.m.s.)\max}$	230	- V
Maximum Cathode Current	$I_k(\max)$	200	200 V
Maximum Grid to Cathode Resistance (Fixed Bias)	$R_{g1}(\max)$	18	15 mA
		250	500 kΩ
CAPACITANCES pF		MECHANICAL DATA	BASE † B9A CAP -
* $g1/all$ 6.7 ap/all 2.7 $g1/ap$.007 at/E 2.2 gt/E 2.4 ap/gt .001 gt/at 2.0 ap/at .014 $g1/gt$.008 $E1/at$.002		Maximum Dimensions mm. Overall length 56 Seated height 49 Diameter 22.2 Mounting Position Unrestricted	
The symbol E denotes the electrodes of any second valve section and the remaining earthy potential electrodes of the section under measurement hgm joined to cathode unless otherwise stated. Measurement with valve cold.			
CHARACTERISTICS.			
Anode Voltage	V_a	Pentode	Triode
Screen Grid Voltage	V_{g2}	125	100 V
Control Grid Voltage	V_{g1}	125	- V
Anode Current	I_a	-1.5	-3 V
Screen Grid Current	I_{g2}	10	14 mA
Mutual Conductance	g_m	3.1	- mA
Amplification Factor	μ	11	5.5 mA/V
Inner Amplification Factor	H_{g1-g2}	50	17
Notes. † Shield completely surrounds pentode. Basing arranged to minimise pentode cathode lead inductance effects with the shorter lead to pin 8. * In fully shielded socket with can. (I.E.C. Publication 100) § The 6GV7 is identical with the 7GV7 with the exception of the heater ratings, which are 6.3 volts, 0.35 ampere. This valve performs the same function as the 30C17 but the basing has been changed to suit certain tuners.			

TRIODE SECTION

 I_a/V_g 

PENTODE SECTION

$$I_a, I_{g2} / V_{g1}$$

$$I_a \text{ —————}$$

$$I_{g2} \text{ - - - - -}$$
V8038D
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