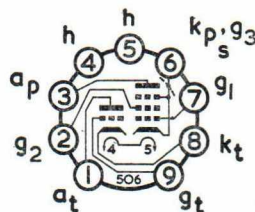


TRIODE PENTODE



Base B9A

GENERAL

This triode pentode valve with separate cathodes is primarily intended for use in television receivers. The pentode has a high slope straight characteristic designed for use as an i.f. amplifier and is combined with a general purpose triode which may, for example, be used as a scanning oscillator. The shield connected to pin 6 completely surrounds the pentode thus minimising interaction between the sections.

Heater Current	I_h	0.3	A
Heater Voltage	V_h	7.4	V

RATINGS

		Triode	Pentode	
Maximum Anode Dissipation	$P_a(\text{max})$	2.0	2.0	W
Maximum Screen Grid Dissipation	$P_{g2}(\text{max})$	—	0.7	W
Maximum Anode Voltage	$V_a(\text{max})$	250	250	V
Maximum Screen Grid Voltage	$V_{g2}(\text{max})$	—	230	V
Maximum Heater to Cathode Voltage (R.M.S.)	$V_{h-k}(\text{r.m.s.})_{\text{max}}$	200	200	V
Maximum Cathode Current	$I_k(\text{max})$	15	18	mA

INTER-ELECTRODE CAPACITANCES*

Grid 1 to Earth	C_{g1-E}	6.4	pF
Anode Pentode to Earth	C_{ap-E}	2.7	pF
Anode Pentode to Grid 1	C_{ap-g1}	0.008	pF
Anode Pentode to Grid 2	C_{ap-g2}	0.35	pF
Grid 1 to Grid 2	C_{g1-g2}	2.1	pF
Grid Triode to Earth	C_{gt-E}	2.4	pF
Anode Triode to Earth	C_{at-E}	1.6	pF
Anode Triode to Grid Triode	C_{at-gt}	2.1	pF
Anode Triode to Anode Pentode	C_{at-ap}	0.02	pF
Grid Triode to Grid 1	C_{gt-g1}	0.015	pF
Grid Triode to Anode Pentode	C_{gt-ap}	0.002	pF
Grid 1 to Anode Triode	C_{g1-at}	0.006	pF

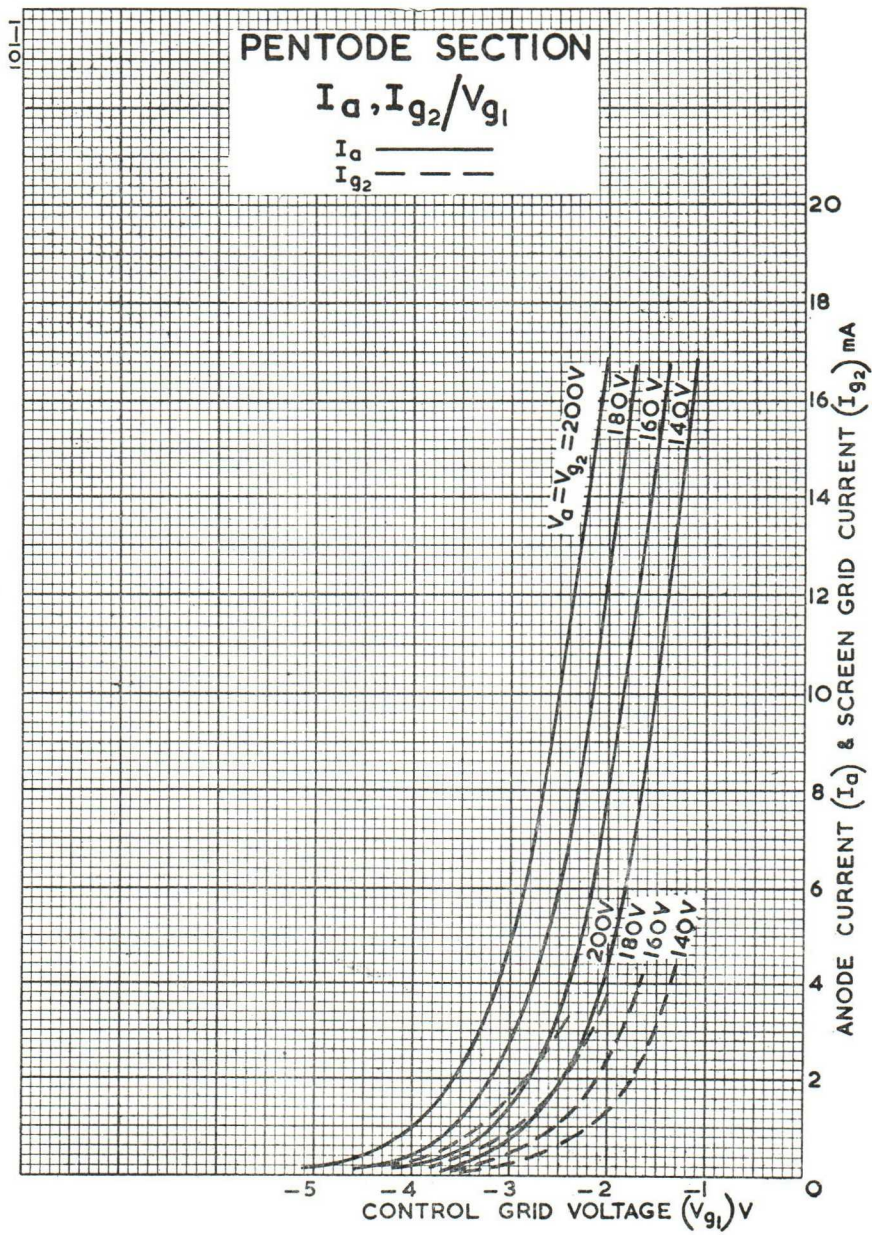
* "Earth" denotes the electrodes of the other section and the remaining earthy potential electrodes of the section under measurement, heater and shields joined to cathode.

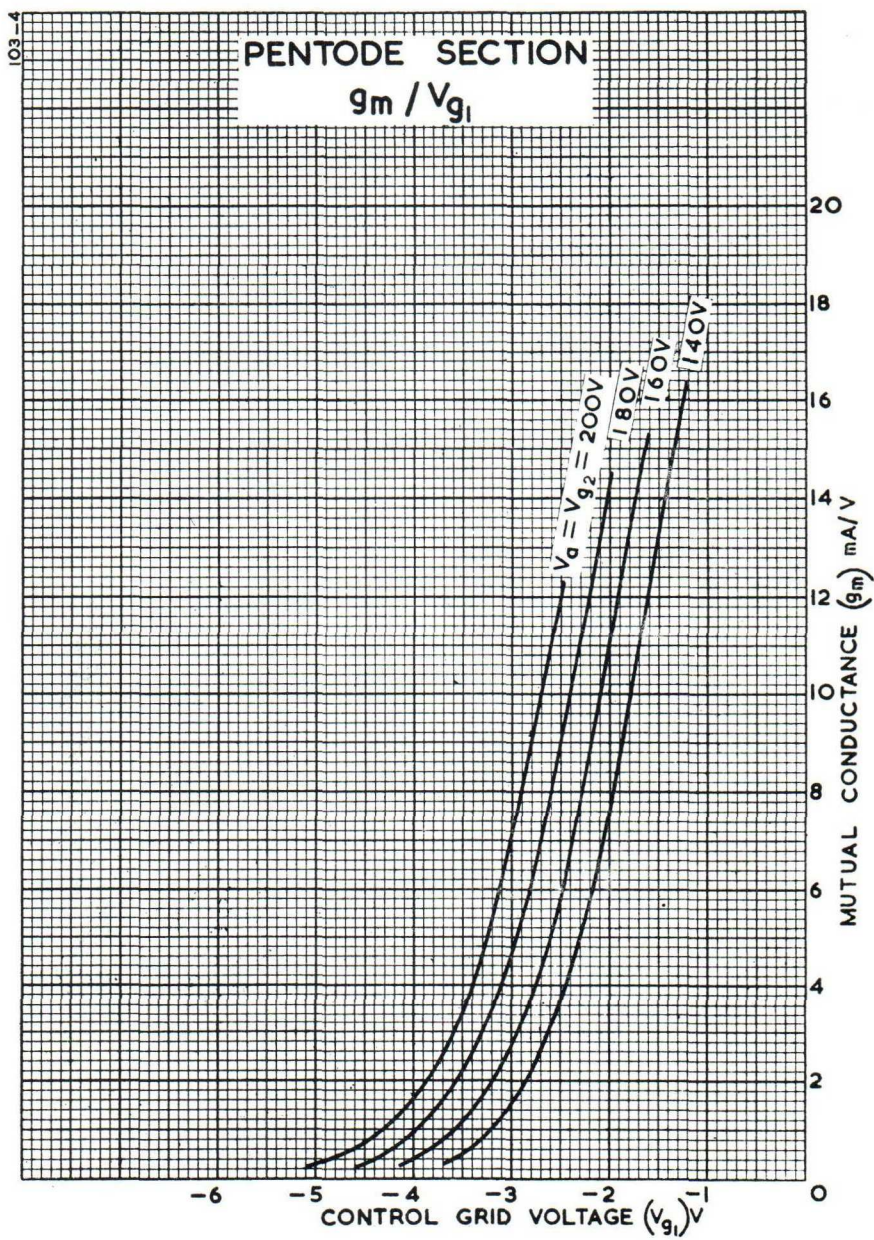
CHARACTERISTICS

		Triode	Pentode	
Anode Voltage	V_a	100	160	V
Screen Grid Voltage	V_{g2}	—	160	V
Control Grid Voltage	V_{g1}	-3.0	-1.7	V
Anode Current	I_a	14	12	mA
Screen Grid Current	I_{g2}	—	4.0	mA
Mutual Conductance	g_m	5.5	14.5	mA/V
Anode Resistance ($\delta V_a / \delta I_a$)	r_a	3.1	—	k Ω
Amplification Factor	μ	17	—	
Inner Amplification Factor	μ_{g1-g2}	—	60	
Working Input Capacitance	$C_{in(w)}$	—	10.6*	pF

* In fully-shielded socket without can (I.E.C. Publication 100).

MOUNTING POSITION—Unrestricted.





30FL14
PCF808

VALVES

MAZDA

