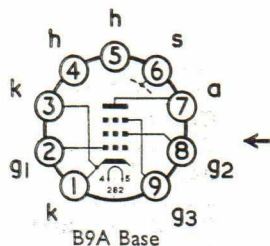




HIGH SLOPE SCREENED H.F. PENTODE



GENERAL

This valve is a straight high slope screened H.F. pentode intended for use in AC or AC/DC television receivers for I.F. amplification, video output and for synchronising pulse separation.

Heater Voltage	V_h	6.3	V
Heater Current	I_h	0.3	A

RATINGS

Maximum Anode Dissipation	$P_a(\max)$	3*	W
Maximum Screen Dissipation	$P_{g2}(\max)$	1*	W
Maximum Anode Voltage	$V_a(\max)$	250	V
Maximum Screen Voltage	$V_{g2}(\max)$	250	V
Maximum Heater to Cathode Voltage (R.M.S.)	$V_{h-k}(\text{r.m.s.})_{\max}$	200†	V
Maximum Resistance Control Grid to Cathode		600‡	kΩ

* With grid to cathode resistance not exceeding 10kΩ.

† From cathode to higher potential heater pin.

‡ With maximum anode dissipation 2W, maximum screen dissipation 0.5W and assuming a common anode and screen decoupling resistance of not less than 2.2kΩ ± 10%.

INTER-ELECTRODE CAPACITANCES

	§		**	←
Grid 1 to Earth	c_{in}	8.3	8.6	9.6 pF ←
Anode to Earth	c_{out}	3.3	3.6	4.6 pF ←
Grid 1 to Anode	c_{g1-a}	0.0065	0.007	0.008 pF ←
Grid 1 to Grid 3	c_{g1-g3}	0.16	0.16	0.17 pF ←
Grid 1 to Grid 2	c_{g1-g2}	2.5	2.5	2.5 pF ←
Grid 2 to Anode	c_{g2-a}	0.16	0.24	0.42 pF ←
Grid 3 to Anode	c_{g3-a}	0.6	0.61	0.63 pF ←

§ In fully shielded socket, without can.

|| With holder capacity balanced out.

** Total capacity including B9A ceramic holder without skirt or radial shield (Plessey holder type CP180014/1).

"Earth" denotes the remaining earthy potential electrodes, heater and shields joined to cathode.

Indicates a change ←

TYPICAL OPERATION

Anode Voltage	V_a	170	V	←
Screen Voltage	V_{g2}	170	V	
Cathode Self Bias Resistance	R_k	150	Ω	
Grid Bias Voltage (Approx.)	V_{g1}	-1.9	V	
Anode Current	I_a	10	mA	
Screen Current	I_{g2}	2.6	mA	
Mutual Conductance	g_m	9.2	mA/V	
Inner Amplification Factor	μ_{g1-g2}	60		
Input Loss at 38 Mc/s	$r_{g1-k(w)}$	12††	k Ω	←
Input Capacity Working	$c_{in(w)}$	11.5††	pF	←
Change in Input Capacity produced by biassing valve to cut-off	$\Delta c_{in(w)}$	2.4§§		←
Equivalent Grid Noise Resistance	R_{eq}	670	Ω	

†† With the two cathodes strapped and joined directly to earth.

†† In fully shielded socket, without can at 38 Mc/s.

§§ Hot capacity at 38 Mc/s.

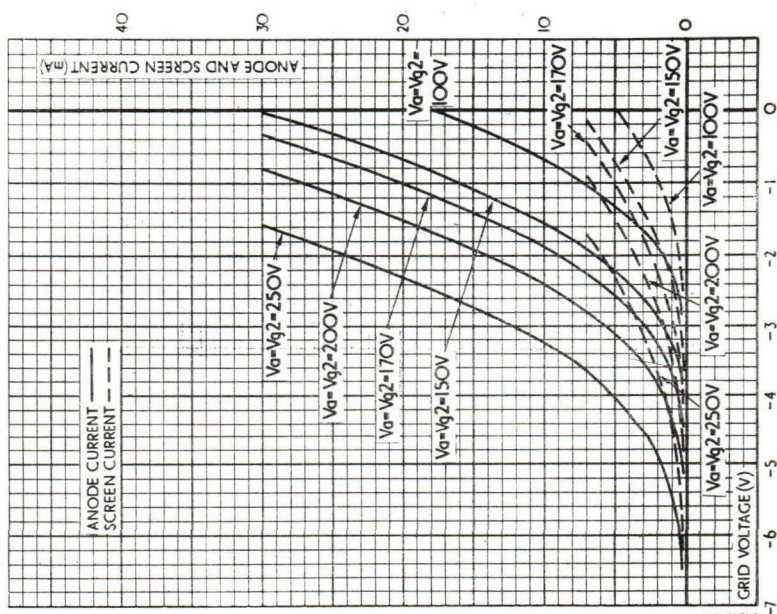
MOUNTING POSITION—Unrestricted.

APPROXIMATE WEIGHT

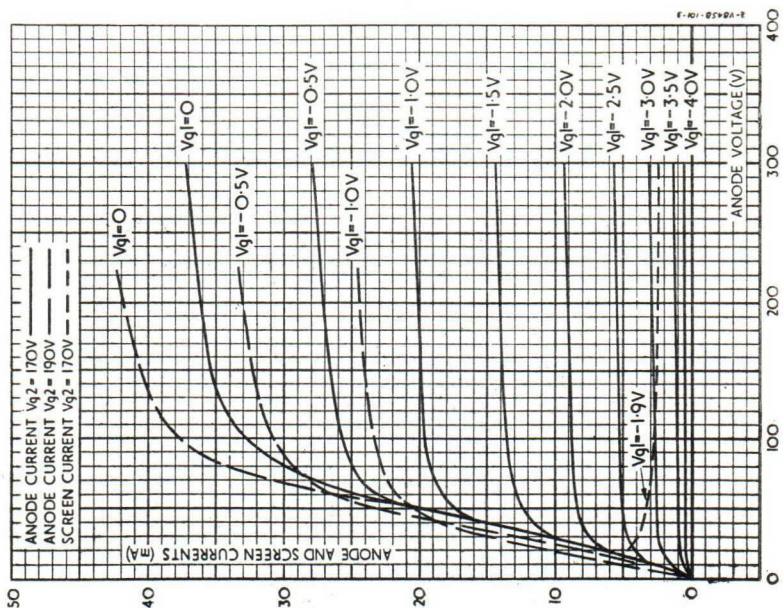
Net	0.5 oz
Packed	0.75 oz

Indicates a change ←

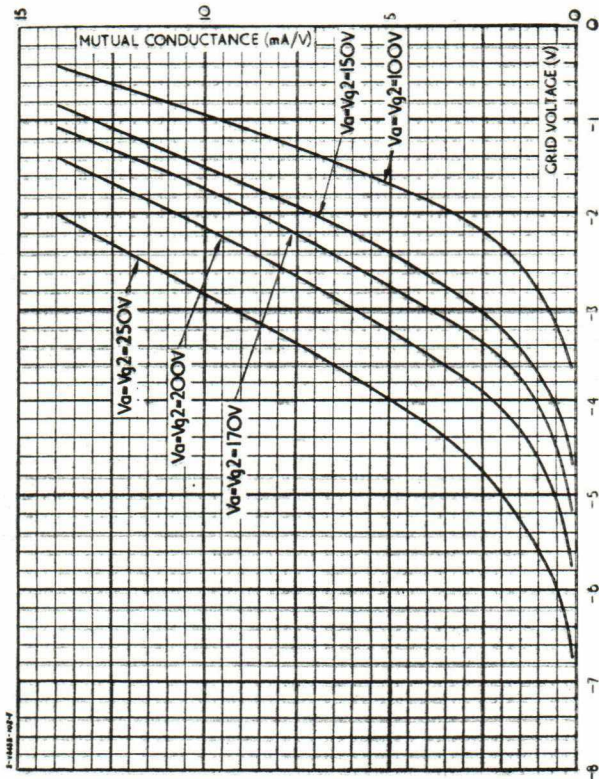
AVERAGE CHARACTERISTIC CURVES: $I_a, I_g2/V_{g1}$



AVERAGE CHARACTERISTIC CURVES: $I_a, I_g2/V_{g2}$



AVERAGE CHARACTERISTIC CURVES: g_m/V_{g1}



Indicates a change ←