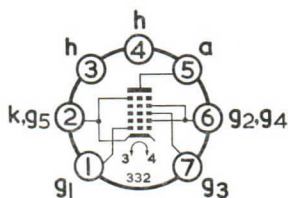


DUAL CONTROL HEPTODE



Base B7G

GENERAL

This valve is a dual control heptode intended for use in television receivers.

Heater Voltage	V_h	6.3	V
Heater Current	I_h	0.3	A

RATINGS

Maximum Anode Dissipation	$P_a(\max)$	1.0	W
Maximum Screen Grids Dissipation	$P_{g2+g4}(\max)$	1.0	W
Maximum Anode Voltage	$V_a(\max)$	300	V
Maximum Anode Supply Voltage	$V_{a(b)\max}$	550	V
Maximum Screen Grids Voltage	$V_{g2+g4}(\max)$	100	V
Maximum Screen Grids Supply Voltage	$V_{g2+g4(b)\max}$	300	V
Maximum Cathode Current	$I_{k(\max)}$	14	mA
Maximum Control Grid to Cathode Resistance	$R_{g1-k(\max)}$	470	k Ω
Maximum Grid 3 to Cathode Resistance	$R_{g3-k(\max)}$	2.2	M Ω
For $V_{g2+g4} \leq 30V$		5.0	M Ω
Maximum Heater to Cathode Voltage, Cathode Positive	$V_{h-k(\max)}$	200	V
Cathode Negative		100	V

INTER-ELECTRODE CAPACITANCES

Anode to Grid 1	C_{a-g1}	<0.07	pF
Anode to Grid 3	C_{a-g3}	<0.36	pF
Grid 1 Input	$C_{in(g1)}$	5.5	pF
Grid 3 Input	$C_{in(g3)}$	7.0	pF
Output	C_{out}	7.5	pF
Grid 1 to Grid 3	C_{g1-g3}	<0.22	pF

CHARACTERISTICS

Anode Voltage	V_a	10	100	100	V
Screen Grids Voltage	V_{g2+g4}	30	30	30	V
Control Grid Voltage	V_{g1}	0	0	-1.0	V
Grid 3 Voltage	V_{g3}	0	-1.0	0	V
Anode Current	I_a	2.0	0.8	0.75	mA
Screen Grids Current	I_{g2+g4}	3.5	4.0	1.1	mA
Mutual Conductance (Control Grid to Anode)	$g_m(g1-a)$	—	—	1.2	mA/V
Mutual Conductance (Grid 3 to Anode)	$g_m(g3-a)$	—	1.55	—	mA/V
Valve Anode Resistance ($\delta V_a / \delta I_a$)	r_a	—	400	900	k Ω
Control Grid Voltage ($I_a = 50\mu A$)	V_{g1}	—	—	-2.5	V
Grid 3 Voltage ($I_a = 50\mu A$)	V_{g3}	—	-2.2	—	V

