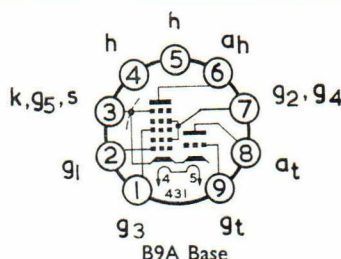


TRIODE HEPTODE



GENERAL

This triode heptode is intended for use as a noise cancelled synchronising pulse separator and time base oscillator.

Heater Voltage	V_h	6.3	V
Heater Current	I_h	0.3	A

RATINGS

		Triode	Heptode	
Maximum Anode Dissipation	$P_a(\max)$	1.3	1.7	W
Maximum Screen Grids Dissipation	$P_{g2+g4}(\max)$	—	0.8	W
Maximum Anode Supply Voltage	$V_a(b)\max$	550	550	V
Maximum Anode Voltage	$V_a(\max)$	250	250	V
Maximum Screen Grids Supply Voltage	$V_{g2+g4(b)\max}$	—	550	V
Maximum Screen Grids Voltage	$V_{g2+g4(\max)}$	—	250	V
Minimum Screen Grids Voltage	$V_{g2+g4(\min)}$	—	10	V
Maximum Peak Negative Control Grid Voltage	$-V_{g1(pk)\max}$	200	150	V
Maximum Peak Negative Grid 3 Voltage	$-V_{g3(pk)\max}$	—	150	V
Maximum Cathode Current	$I_k(\max)$	10	12.5	mA
Maximum Control Grid to Cathode Resistance	$R_{g1-k(\max)}$	3.0	3.0	M Ω
Maximum Grid 3 to Cathode Resistance	$R_{g3-k(\max)}$	—	3.0	M Ω
Maximum Heater to Cathode Voltage	$V_{h-k(\max)}$	—	100	V

INTER-ELECTRODE CAPACITANCES

Anode Heptode to Anode Triode	C_{ah-at}	<0.25	pF
Anode Heptode to Grid Triode	C_{ah-gt}	<0.09	pF
Grid 1 to Anode Triode	C_{g1-at}	<0.08	pF
Grid 1 to Grid Triode	C_{g1-gt}	<0.10	pF
Grid 3 to Anode Triode	C_{g3-at}	<0.13	pF
Anode Heptode to Grid 1	C_{ah-g1}	<0.009	pF
Triode Input	$C_{in(t)}$	3.0	pF
Anode Triode to Grid Triode	C_{at-gt}	1.1	pF

CHARACTERISTICS

		Triode	Heptode	
Anode Voltage	V_a	50	135	V
Screen Grids Voltage	V_{g2+g4}	—	14	V
Grid 3 Voltage	V_{g3}	—	0	V
Control Grid Voltage	V_{g1}	0	0	V
Anode Current	I_a	3.0	1.7	mA
Screen Grids Current	I_{g2+g4}	—	0.9	mA
Mutual Conductance	g_m	3.7	2.2	mA/V
Amplification Factor	μ	50	—	
Grid 3 Voltage for $I_a = 20 \mu A$	V_{g3}	—	-2.0	V
Control Grid Voltage for $I_a = 20 \mu A$	V_{g1}	—	-1.9	V
Anode Current ($V_a = 200 V, V_g = -11 V$)	I_a	<100	—	μA
Maximum Negative Grid 3 Voltage ($I_{g3} = +0.3 \mu A$)		—	1.3	V
Maximum Negative Grid 1 Voltage ($I_{g1} = +0.3 \mu A$)		1.3	1.3	V

