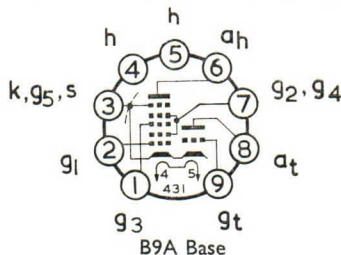


### TRIODE HEPTODE



#### 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 $\Omega$
Maximum Grid 3 to Cathode Resistance	$R_{g3-k(\max)}$	—	3.0 M $\Omega$
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	$\mu$	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 ( $V_a = 200 V, V_{g1} = -11 V$ )	$I_a$	<100	$\mu A$
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

