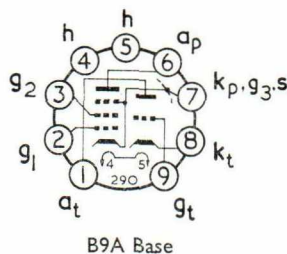


TIME BASE TRIODE PENTODE



GENERAL

This triode pentode is for use in line oscillator circuits with the pentode section as an oscillator and the triode section as a reactance valve.

Heater Current	I_h	0.3	A
Heater Voltage	V_h	9.0	V

DESIGN CENTRE RATINGS

		Triode	Pentode	
Maximum Anode Dissipation	$P_{a(max)}$	1.4	1.2	W
Maximum Screen Grid Dissipation	$P_{g2(max)}$	—	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 Grid Supply Voltage	$V_{g2(b)max}$	—	550	V
Maximum Screen Grid Voltage	$V_{g2(max)}$	—	250	V
Maximum Heater to Cathode Voltage	$V_{h-k(max)}$	100†	100†	V
Maximum Cathode Current	$I_k(max)$	10	15	mA
Maximum Peak Cathode Current	$i_k(pk)max$	—	50*	mA
Maximum Grid to Cathode Resistance	$R_{g-k(max)}$	3.0	0.56	MΩ
Fixed Bias				

* Maximum Duty Factor 30 per cent, maximum pulse duration 30 μs .

† To avoid hum interference the A.C. component should not exceed 65 V at $Z_{g(max)} = 50 k\Omega$ ($f = 50 c/s$)

INTER-ELECTRODE CAPACITANCES

		Triode	Pentode	
Input	C_{in}	2.4	5.4	pF
Anode to Grid 1	C_{a-g1}	1.5	0.06	pF
Grid 1 to Heater	C_{g1-h}	<0.1	<0.1	pF

CHARACTERISTICS

		Triode	Pentode	
Anode Voltage	V_a	200	100	V
Screen Grid Voltage	V_{g2}	—	100	V
Control Grid Voltage	V_{g1}	-2.0	-1.0	V
Anode Current	I_a	3.5	6.0	mA
Screen Grid Current	I_{g2}	—	1.7	mA
Mutual Conductance	g_m	3.5	5.5	mA/V
Valve Anode Resistance ($\partial v_a / \partial i_a$)	r_a	20	400	kΩ
Amplification Factor	μ	70	—	
Inner Amplification Factor	μ_{s1-g2}	—	47	
Anode Current at $V_{g1} = 0 V$		—	12.5	mA
Screen Grid Current at $V_{g1} = 0 V$		—	3.5	mA
Anode Current at $I_g = +10 \mu A$, $V_a = 200 V$		10	—	mA
Negative Grid Voltage at $V_a = V_{g2} = 200 V$, $I_a = 10 \mu A$		—	<16	V
Negative Grid Voltage at $I_g = +0.3 \mu A$		<1.3	<1.3	V

