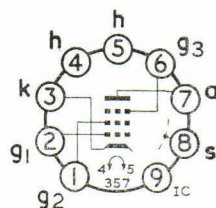


VIDEO OUTPUT PENTODE



B9A Base

GENERAL

This video output pentode is particularly suitable for use in projection television receivers or with high definition television systems.

Heater Current	I_h	0.3	A
Heater Voltage	V_h	15	V

RATINGS

Maximum Anode Dissipation	$P_a(\max)$	9.0	W
Maximum Screen Grid Dissipation	$P_{g2}(\max)$	2.0	W
Maximum Anode Supply Voltage	$V_{a(b)\max}$	550	V
Maximum Anode Voltage	$V_a(\max)$	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	$V_{h-k}(\max)$	150	V
Maximum Cathode Current	$I_k(\max)$	70	mA
Maximum Control Grid to Cathode Resistance	$R_{g1-k}(\max)$		
Self Bias		1.0	M Ω
Fixed Bias		500	k Ω
Maximum Heater to Cathode Resistance	$R_{h-k}(\max)$	20	k Ω

INTER-ELECTRODE CAPACITANCES

Input	C_{in}	10.4	pF
Output	C_{out}	6.6	pF
Anode to Control Grid	C_{a-g1}	<0.06	pF
Control Grid to Heater	C_{g1-h}	<0.15	pF

CHARACTERISTICS

Anode Voltage	V_a	170	200	V
Screen Grid Voltage	V_{g2}	170	200	V
Control Grid Voltage	V_{g1}	-2.3	-3.5	V
Anode Current	I_a	36	36	mA
Screen Grid Current	I_{g2}	5.0	5.0	mA
Mutual Conductance	g_m	10	10	mA/V
Valve Anode Resistance ($\partial V_a / \partial I_a$)	r_a	100	100	k Ω
Inner Amplification Factor	μ_{g1-g2}	24	24	

TYPICAL OPERATION

(Driving a cathode ray tube with cathode injection)

Supply Voltage	V_b	170	V
Screen Grid Voltage	V_{g2}	170	V
Control Grid Voltage	V_{g1}	-6.7	V
Anode Current	I_a	4.0	mA
Screen Grid Current	I_{g2}	0.25	mA
Anode Load Resistance	R_a	2.2	k Ω
Peak Output Voltage	$V_{out(pk)}$	>70	V