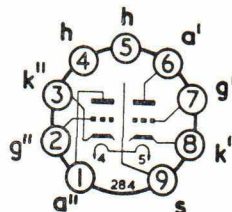


V.H.F. HIGH SLOPE DOUBLE TRIODE



B9A Base

GENERAL

This variable-mu, low noise, high slope frame grid double triode is intended for use as a V.H.F. cascode amplifier.

Heater Current	I_h	0.3	A
Heater Voltage	V_h	7.6	V

RATINGS—Each Section

Maximum Anode Dissipation	$P_a(\max)$	1.8	W
Maximum Anode Supply Voltage	$V_{a(b)\max}$	550	V
Maximum Anode Voltage	$V_a(\max)$	130	V
Maximum Negative Grid Voltage	$-V_g(\max)$	50	V
Maximum Heater to Cathode' Voltage	$V_{h-k'}(\max)$	80	V
Maximum Heater to Cathode'' Voltage	$V_{h-k''}(\max)$	180	V
Heater Negative			
Maximum Cathode Current	$I_k(\max)$	22	mA
Maximum Grid' to Cathode' Resistance	$R_{g'-k'}(\max)$	1.0	MΩ
Maximum Grid'' to Cathode'' Resistance	$R_{g''-k''}(\max)$	500	kΩ
Maximum Heater to Cathode Resistance	$R_{h-k}(\max)$	20	kΩ

INTER-ELECTRODE CAPACITANCES

		Shielded	Unshielded	
Anode' to Anode''	$C_{a'-a''}$	<0.015	<0.045	pF
Grid' to Anode''	$C_{g'-a''}$	<0.004	<0.004	pF
Anode' to Grid'	$C_{a'-g'}$	1.9	1.9	pF
Grid' to Cathode', Heater and Shield	$C_{g'-k',h,s}$	3.5	3.5	pF
Anode' to Cathode', Heater and Shield	$C_{a'-k',h,s}$	2.3	1.7	pF
Grid' to Heater	$C_{g'-h}$	<0.28	<0.28	pF
Anode'' to Grid''	$C_{a''-g''}$	1.9	1.9	pF
Cathode'' to Grid'', Heater and Shield	$C_{k''-g'',h,s}$	6.0	6.0	pF
Anode'' to Grid'', Heater and Shield	$C_{a''-g'',h,s}$	4.0	3.4	pF
Cathode'' to Heater	$C_{k''-h}$	3.0	3.0	pF
Anode'' to Cathode''	$C_{a''-k''}$	0.17	0.18	pF

CHARACTERISTICS—Each Section

Anode Voltage	V_a	90	V
Grid Voltage	V_g	-1.4	V
Anode Current	I_a	15	mA
Mutual Conductance	g_m	12.5	mA/V
Valve Anode Resistance ($\delta V_a / \delta I_a$)	r_a	2.5	kΩ
Amplification Factor	μ	34	
Grid Voltage for $g_m/20$	$V_{g(gm/20)}$	-5.0	V
Grid Voltage for $g_m/100$	$V_{g(gm/100)}$	-9.0	V

NOTE.—The triode on pins 6, 7 and 8 should have the grounded cathode connection and that on pins 1, 2 and 3 should have the grounded grid connection.

