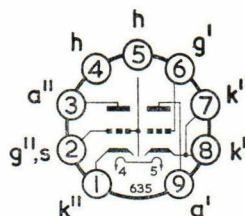


V.H.F. DOUBLE TRIODE



B9A Base

GENERAL

This variable-mu frame grid double triode is intended for use as a cascode R.F. amplifier at frequencies up to 220 MHz.

Heater Current	I_h 0.3	A
Heater Voltage	V_h 7.5	V

RATINGS—Each Section

Maximum Anode Dissipation	$P_a(\max)$	1.8	W
Maximum Anode Voltage	$V_a(\max)$	130	V
Maximum Negative Grid Voltage	$-V_g(\max)$	50	V
Maximum Heater to Cathode ^{''} Voltage	$V_{h-k''}(\max)$		
Heater Negative		200	V
Maximum Cathode Current	$I_k(\max)$	18	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

To fulfil hum requirements, $V_{h-k'}(r.m.s.)$ must be less than 50 V.

INTER-ELECTRODE CAPACITANCES*

Grid ['] to Cathode ['] , Heater, Grid ^{''} , Shield	$C_{g'-k',h,g'',s}$	3.8	pF
Anode ['] to Cathode ['] , Heater, Grid ^{''} , Shield	$C_{a'-k',h,g'',s}$	2.5	pF
Anode ^{''} to Grid ^{''} , Heater, Shield	$C_{a''-g'',h,s}$	4.5	pF
Cathode ^{''} to Grid ^{''} , Heater, Shield	$C_{k''-g'',h,s}$	6.3	pF
Anode ['] to Grid [']	$C_{a'-g'}$	1.9	pF
Grid ['] to Heater	$C_{g'-h}$	<0.3	pF
Anode ['] to Anode ^{''}	$C_{a'-a''}$	<0.015	pF
Grid ['] to Anode ^{''}	$C_{g'-a''}$	<0.005	pF
Anode ^{''} to Grid ^{''}	$C_{a''-g''}$	4.1	pF
Anode ^{''} to Cathode ^{''}	$C_{a''-k''}$	<0.2	pF
Cathode ^{''} to Heater	$C_{k''-h}$	2.9	pF

* Measured with an external shield.

CHARACTERISTICS—Each Section

Anode Voltage	V_a	90	V
Grid Voltage	V_g	-1.2	V
Anode Current	I_a	15	mA
Mutual Conductance	g_m	12.3	mA/V
Valve Anode Resistance ($\delta v_a / \delta i_a$)	r_a	2.9	kΩ
Amplification Factor	μ	36	

NOTE.—The triode on pins 6, 7, 8 and 9 should have the grounded cathode connection and that on pins 1, 2 and 3 should have the grounded grid connection. It is recommended that pins 7 and 8 be strapped.

MUTUAL CONDUCTANCE (g_m) mA/V, VALVE ANODE RESISTANCE $\partial V_a / \partial I_a$ (r_a) k Ω , ANODE CURRENT (I_a) mA

