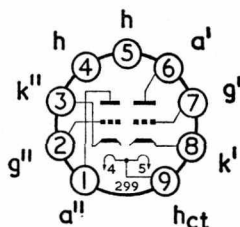


A.F. DOUBLE TRIODE



Base B9A

GENERAL

This valve is a low- μ double triode with similar characteristics to the 12AU7 and the additional feature of improved anode current balance between sections and between valves.

Heater Voltage	V_h	6.3	} or {	12.6 V
Heater Current	I_h	0.3		0.15 A

RATINGS (Each Section)

Maximum Anode Dissipation	$P_a(\text{max})$	2.75	W
Maximum Anode Supply Voltage	$V_{a(b)\text{max}}$	550	V
Maximum Anode Voltage	$V_a(\text{max})$	300	V
Maximum Heater to Cathode Voltage	$V_{h-k}(\text{max})$	100	V
Maximum Peak Heater to Cathode Voltage	$V_{h-k}(\text{pk})\text{max}$	200	V
Maximum Cathode Current	$I_k(\text{max})$	20	mA
Maximum Grid to Cathode Resistance	$R_{g-k}(\text{max})$		
Fixed bias		0.25	M Ω
Self bias		1.0	M Ω

INTER-ELECTRODE CAPACITANCES*

		Section 1	Section 2	
Input	C_{in}	1.6	1.6	pF
Output	C_{out}	0.5	0.35	pF
Grid to Anode	C_{g-a}	1.5	1.5	pF

* Without external shield.

OPERATING CHARACTERISTICS (Each Section)

$V_a = 250\text{V}$, $V_g = -8.5\text{V}$, $V_h = 12.6\text{V}$ (Series Connection)

Anode Current	I_a	10.5	mA
Anode Resistance ($\partial v_a / \partial i_a$)	r_a	7.7	k Ω
Mutual Conductance	g_m	2.2	mA/V
Amplification Factor	μ	17	
Anode Current Balance Between Sections	$I_{a'} - I_{a''}$	$< \pm 1.5$	mA

OPERATION AS RESISTANCE COUPLED AMPLIFIER

Anode Supply Voltage	$V_{a(b)}$	100	250	V
Anode Load Resistor	R_a	0.1	0.1	M Ω
Cathode Bias Resistor	R_k	3.9	2.7	k Ω
Peak Output Voltage	$V_{out}(\text{pk})$	17	50	V
Stage Gain		11	12	—

Characteristic curves are identical to those given for the 12AU7.