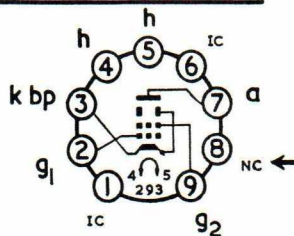


OUTPUT TETRODE



GENERAL

This valve has been designed for use in the output stage of Audio Amplifiers or Field Time Bases and has a heater which is suitable for AC/DC operation.

Heater Current	I_h	0.3	A
Heater Voltage	V_h	12.6	V

RATINGS

Maximum Anode Dissipation	$P_a(\text{max})$	6	W
Maximum Screen Grid Dissipation—Continuous		1.8	W
Maximum Screen Grid Dissipation—Speech and Music		2.7	W
Maximum Anode Voltage	$V_a(\text{max})$	250	V
Maximum Screen Grid Voltage	$V_{g2}(\text{max})$	250	V
Maximum Heater to Cathode Voltage (R.M.S.)	$V_{h-k}(\text{r.m.s.})_{\text{max}}$	150*	V
Maximum Cathode Current	$I_{k(\text{max})}$	50	mA

The grid to cathode circuit resistance must not exceed 0.5 M Ω with cathode self bias.

* Measured with respect to the higher potential heater pin.

CHARACTERISTICS

Anode Voltage	V_a	170	V
Screen Grid Voltage	V_{g2}	180	V
Control Grid Voltage	V_{g1}	-9.4	V
Anode Current	I_a	35	mA
Screen Grid Current	I_{g2}	8.8	mA
Mutual Conductance	g_m	7.9	mA/V
Inner Amplification Factor	μ_{g1-g2}	13	

CLASS A AUDIO OUTPUT TYPICAL OPERATION

Anode Voltage	V_a	170	V
Screen Voltage	V_{g2}	180	V
Anode Current (Quiescent)	$I_{a(o)}$	31	mA
Screen Current (Quiescent)	$I_{g2(o)}$	7.3	mA
Grid Bias Applied	V_{g1}	-10.3	V
Anode Load	R_a	5 $\dagger$	k Ω
Power Output	P_{out}	2.25 $\dagger$	W
Input Swing Voltage (R.M.S.)	$V_{in}(\text{r.m.s.})$	3.9 $\dagger$	V

The above operating conditions are taken with constant anode and screen supply voltages.

$\dagger$ For 5% Third Harmonic and Second Harmonic not exceeding 5%.

FIELD TIME BASE OPERATION

The field output stage should be designed to allow for valve spread and deterioration during life in addition to component variation.

Values for total peak anode current available for a new average valve and at the assumed end of life point on any valve are as follows:

	V_a (V)	V_{g2} (V)	V_{g1} (V)	I_a (mA)
Average New Valve	50	180	-1	120
Assumed End of Life Condition	50	180	-1	78

MOUNTING POSITION—Unrestricted.

APPROXIMATE WEIGHT

Net	0.5	oz
Packed	1.25	oz

