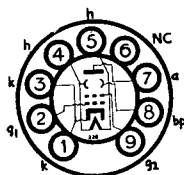


TYPE 5A/170K BEAM TETRODE WIDE-BAND AMPLIFIER



The 5A/170K is an indirectly-heated beam tetrode developed for general-purpose wide-band applications. It has a high mutual conductance, and a high ratio of mutual conductance to capacitance.

CATHODE

Indirectly heated, oxide-coated.

Heater voltage ...	...	...	...	...	...	6.3	V
Nominal current ...	...	...	...	...	...	0.3	A

CHARACTERISTICS

Mutual conductance	Measured at V_a 180 V : V_{g2} 150 V		...	...	16.5	mA/V
Screen grid μ ...	I_a 13 mA I_{g2} 3 mA approx.		...	...	50	

DIRECT INTERELECTRODE CAPACITANCES

(Measured with external shield in accordance with RMA-NEMA standard method.)

Input ...	...	...	...	...	7.9 $\pm$ 0.6	pF
Increase in C_{in} when hot	...	...	...	...	3	pF
Output ...	...	...	...	...	2.9 $\pm$ 0.4	pF
Anode to grid (max.)	...	...	...	...	0.03	pF
Heater to cathode	...	...	...	...	5	pF

MAXIMUM RATINGS

Maximum anode supply voltage ($I_a = 0$)	...	...	...	400	V
Maximum direct anode voltage	...	...	...	210	V
Maximum direct anode dissipation	...	...	...	3.3	W
Maximum screen supply voltage ($I_{g2} = 0$)	...	...	...	400	V
Maximum direct screen voltage	...	...	...	175	V
Maximum direct screen dissipation	...	...	...	0.9	W
Maximum grid voltage	...	...	...	0	V
Maximum direct cathode current	...	...	...	25	mA

Continued overleaf

TYPICAL OPERATING CONDITIONS

*Direct anode voltage	...	...	...	...	180	V
Direct anode current	...	...	...	...	13	mA
*Direct screen voltage	...	...	...	...	150	V
Direct screen current	...	...	...	...	3	mA
†Direct grid supply voltage	...	...	...	...	+9	V
†Cathode resistor	...	...	...	...	630	Ω

* Referred to cathode.

† It is recommended that the required grid bias be obtained in this manner.

The actual voltage between grid and cathode is equal to the difference between the grid supply voltage and the voltage developed across the cathode resistor when cathode current is flowing.

