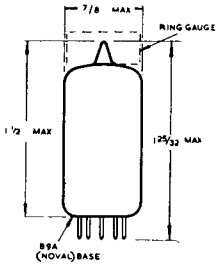
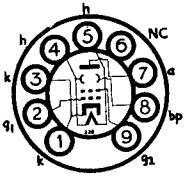


TYPE **5A/170K** BEAM TETRODE WIDE-BAND AMPLIFIER



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_{g_2} 150 V, 1_a 13 mA	16.5	mA/V
Screen grid μ ...	1_{g_2} 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 ($1_a = 0$)	400	V
Maximum direct anode voltage	210	V
Maximum direct anode dissipation	3.3	W
Maximum screen supply voltage ($1_{g_2} = 0$)	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.