General Characteristics (Stated in conventional tube terminology)

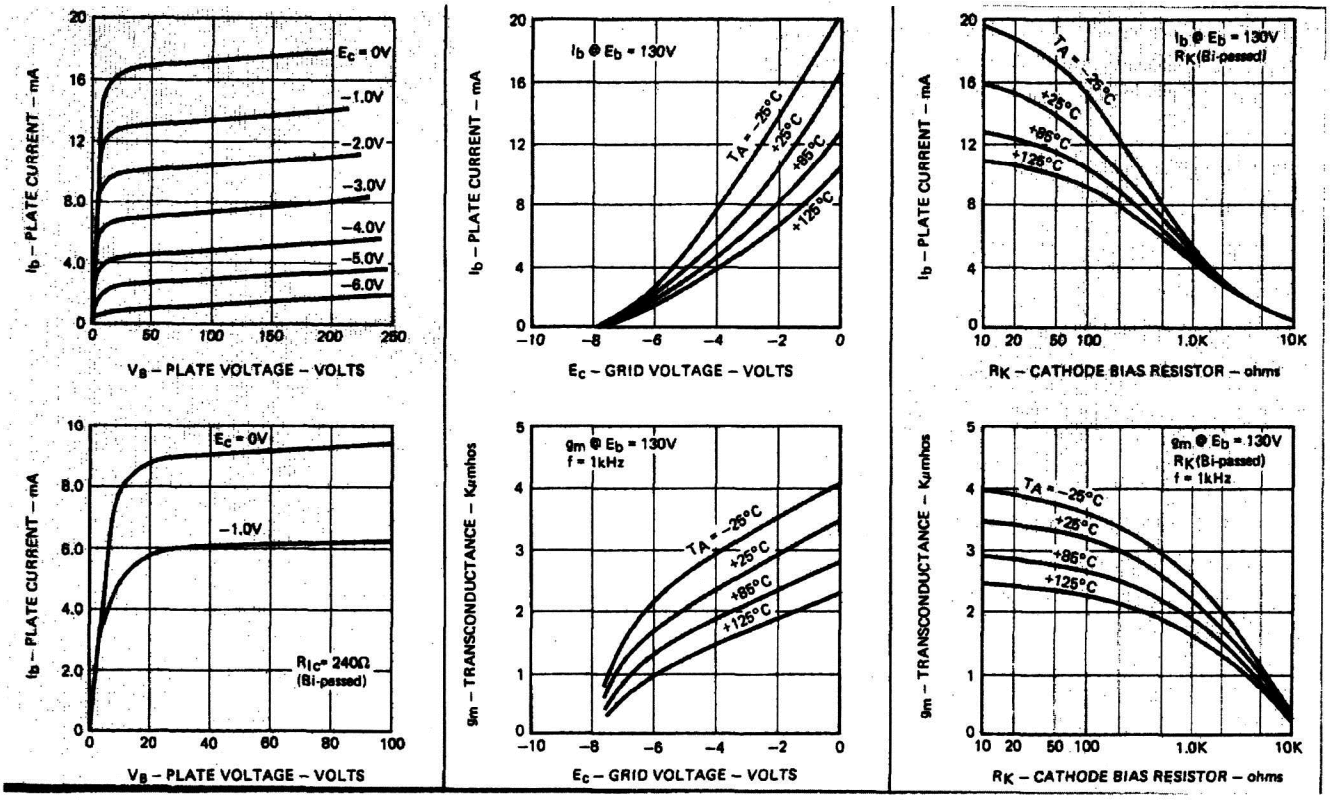
Heater Voltage	N/C (Open)
Heater Current	N/C
Grid-to-Plate Capacitance (Each unit)	3.5μμF
Grid-to-Cathode Capacitance (Each unit)	25μμF
Plate-to-Plate Capacitance	0.1μμF
Heater-to-Cathode Capacitance	N/C

Operating Conditions and Characteristics (At 25°C unless otherwise specified)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNITS
Plate Supply Voltage	E_b		130	250	Volts
Cathode-Bias Resistor	R_K		240		ohms
Peak A-F Grid-to-Grid Voltage	E_{C1C2}			20	Volts
Plate Resistance	r_p	50	250		Kilohms
Transconductance	g_m	2000	3000	6000	Micromhos
Amplification Factor	μ	100	750		
Grid Voltage for Plate Current of 10μA			−7.0	−10	Volts
Peak Negative Grid Voltage	E_C	−150	−300		Volts
Plate Current	I_b	4.0	9.0	15	Milliamps
Grid Current	I_C		2.0	100	Nanoamps
Tube Operating Temperature	O_T	−55	+75	+125	°Centigrade

NOTE: In most cases, the more pentode type characteristics will enhance present circuit performance. In a few instances, the user might need a selected range.

Average Plate Characteristics (Each Unit)



NOTE: In series filament circuits, all tubes must be replaced by solid state replacements or appropriate resistor connected externally between pins 3 and 4. Some applications may require modified TS12AT7. Consult Teledyne Semiconductor for application information.