Type 6679/12AT7 is designed specifically for use in mobile communications equipment. The 6679/12AT7 may be operated without serious degradation under normal variations in supply voltage as encountered with automotive electrical systems. Also consistent with the requirements of the equipment, the tube is capable of withstanding appreciable on-off cycling.

MECHANICAL DATA

Bulb	T-6½
Base	E9-1, Small Button 9-Pin
Outline	6-2
Basing	9A
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

	Series/Parallel	
Heater Voltage[1]	12.6/6.3 Volts	
Heater Current	150/300 Ma	
Heater-Cathode Voltage (Design Maximum Values)		
Heater Positive with Respect to Cathode	100 Volts	Max.
Heater Negative with Respect to Cathode	100 Volts	Max.

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

	Section 1[2]	Section 2[2]	
Grid to Plate	1.5	1.5 μμf	
Input	2.2	2.2 μμf	
Output	0.5	0.4 μμf	
Grid to Grid	.005	μμf	Max.
Plate to Plate	0.4	μμf	Max.
Heater to Cathode	2.4	2.4 μμf	

Grounded Grid Operation

Plate to Cathode	0.2	0.2 μμf
Input	4.6	4.6 μμf
Output	1.8	1.8 μμf

RATINGS (Design Maximum Values) Each Section

Plate Voltage	330 Volts	Max.
Positive Grid Voltage	0 Volts	Max.
Negative Grid Voltage	55 Volts	Max.
Plate Dissipation	2.8 Watts	Max.

CHARACTERISTICS AND TYPICAL OPERATION

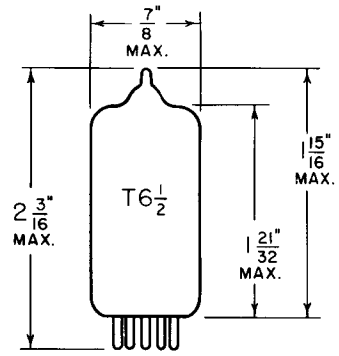
Class A1 Amplifier — Each Section

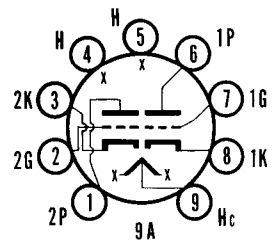
Plate Voltage	100	250 Volts
Cathode Bias Resistor	270	200 Ohms
Plate Current	3.7	10.0 Ma
Plate Resistance	15,000	10,900 Ohms
Transconductance	4000	5500 μmhos
Amplification Factor	60	60
Ec for Ib = 10 μa (Approx.)	–5	–12 Volts

QUICK REFERENCE DATA

Sylvania Type 6679/12AT7 is designed specifically for mobile operation. It is a T-6½ high mu duo triode intended for use as a grounded grid amplifier or a frequency converter at frequencies below 300 Mc.

Type 6679/12AT7 possesses electrical characteristics essentially equivalent to Type 12AT7.





SYLVANIA
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File Under
RECEIVING TUBES

SPECIAL TESTS AND RATINGS

Heater-Cycling Life Test

Statistical sample operated for 2000 cycles minimum to evaluate and control heater-cathode defects. Conditions of test include Ef = 15 volts (series-heater connection) cycled for one minute on and one minute off. Eb + Ec = 0 volts and Ehk = 135 volts with heater positive with respect to cathode.

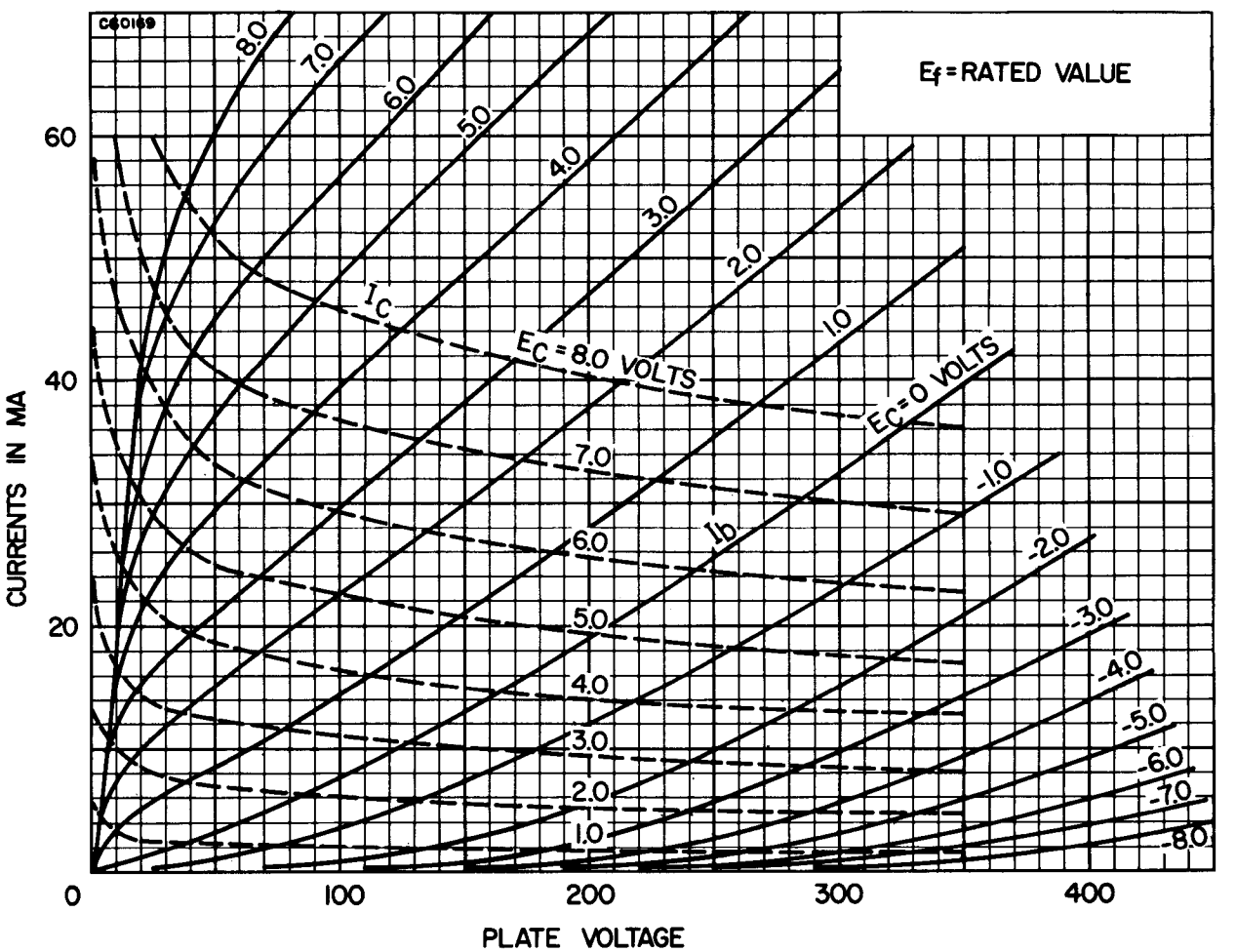
Average Transconductance at Reduced Heater Voltage, Each Section . . . . . 4400 μmhos

Ef = 10.0 volts, Eb = 250 volts, Rk = 200 ohms (bypassed).

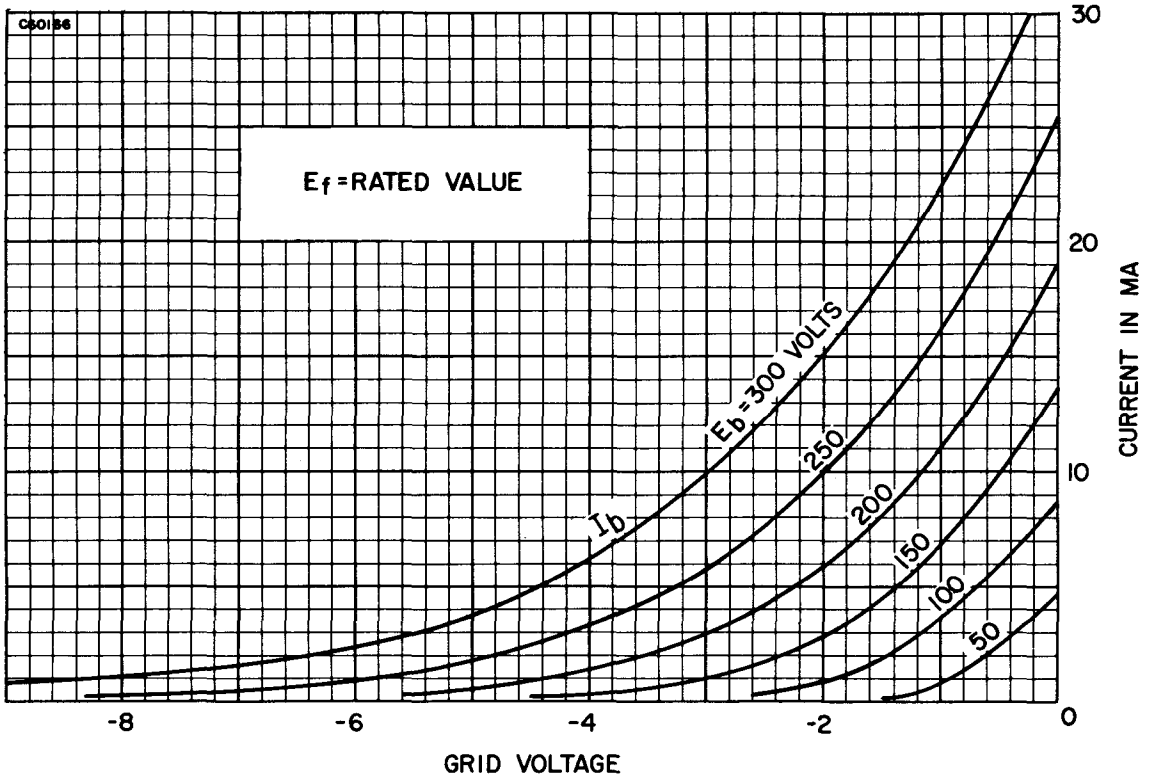
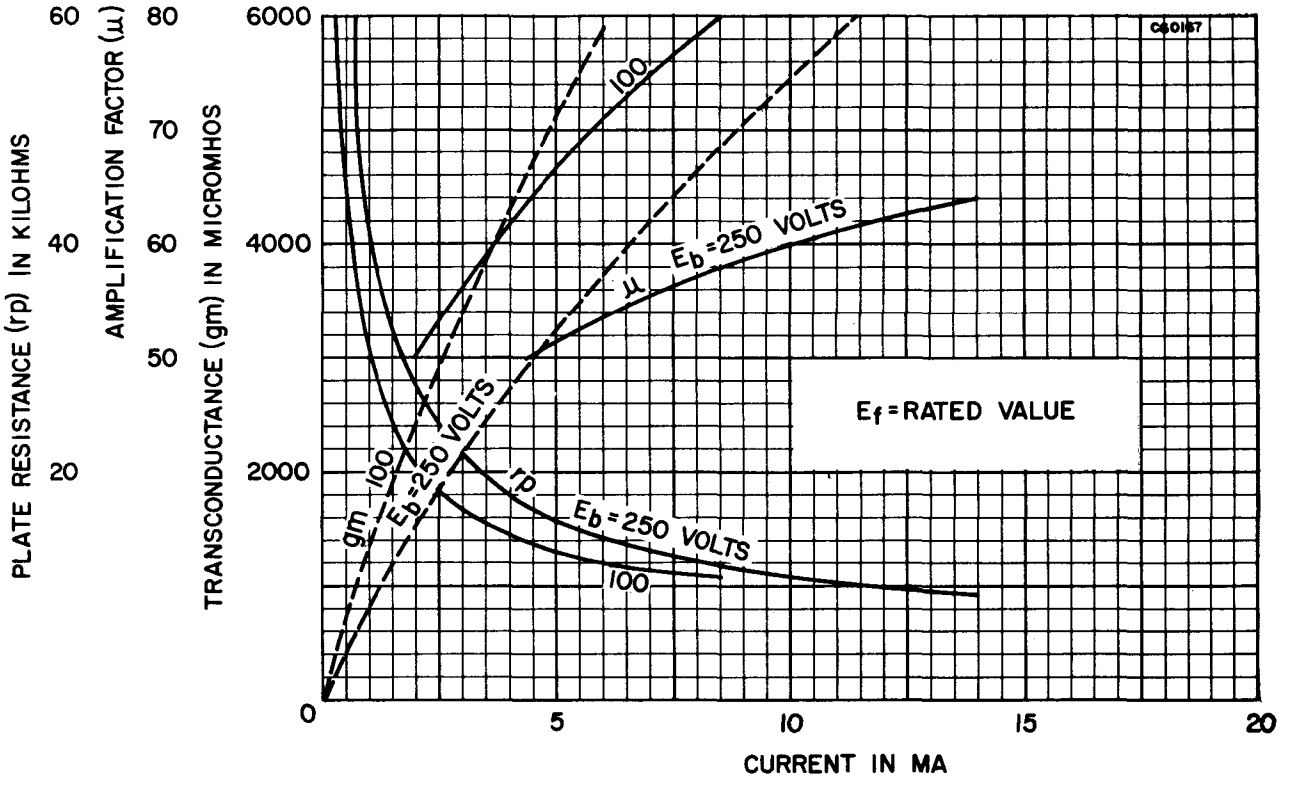
NOTES:

1. *When operated from automotive electrical systems, the heater may be subjected to voltage variations as great as ±20 percent. Although such extremes in heater voltage may be tolerated for short periods, increased equipment reliability can be achieved with improved supply-voltage regulation.*
2. *Section No. 1 connects to Pins 6, 7 and 8. Section No. 2 connects to Pins 1, 2 and 3.*

AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS