

Type 6677/6CL6 is designed specifically for use in mobile communications equipment. The 6677/6CL6 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	Small Button Noval 9-Pin
Outline	6-3
Basing	9BV
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage ¹	6.3 Volts	
Heater Current	650 Ma	
Heater-Cathode Voltage (Design Maximum Values)		
Heater Negative with Respect to Cathode	100 Volts	Max.
Heater Positive with Respect to Cathode	100 Volts	Max.

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid No. 1 to Plate	0.12 $\mu\mu\text{f}$
Input	11 $\mu\mu\text{f}$
Output	5.5 $\mu\mu\text{f}$

RATINGS (Design Maximum Values)

Plate Voltage	330 Volts	Max.
Grid No. 2 Voltage	See Rating Chart	
Grid No. 2 Voltage Supply	330 Volts	Max.
Grid No. 3 Voltage	0 Volts	Max.
Grid No. 1 Voltage		
Negative Bias Value	50 Volts	Max.
Positive Bias Value	0 Volts	Max.
Plate Dissipation	8.5 Watts	Max.
Grid No. 2 Input	2.0 Watts	Max.
Grid No. 1 Circuit Resistance		
Fixed Bias	0.1 Megohm	Max.
Cathode Bias	0.5 Megohm	Max.
Bulb Temperature (At Hottest Point)	210 °C	Max.

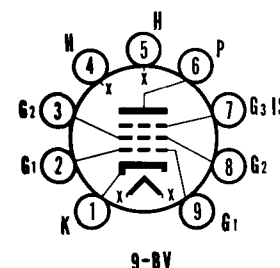
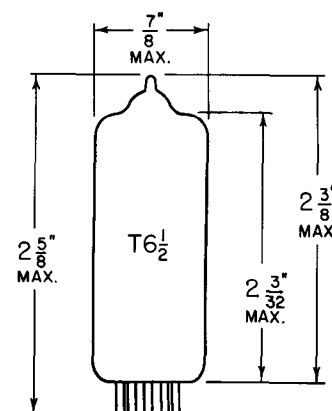
CHARACTERISTICS

Plate Voltage	250 Volts
Grid No. 2 Voltage	150 Volts
Grid No. 3 Voltage—Connected to Cathode at Socket	
Grid No. 1 Bias Voltage	-3 Volts
Peak AF Grid No. 1 Signal Voltage	3 Volts
Zero Signal Plate Current	30 Ma
Maximum Signal Plate Current	31 Ma
Zero Signal Grid No. 2 Current	7 Ma
Maximum Signal Grid No. 2 Current	7.2 Ma
Transconductance	11,000 μmhos
Plate Resistance (Approx.)	0.15 Megohm
Load Resistance	7500 Ohms
Total Harmonic Distortion	8 Percent
Maximum Signal Power Output	2.8 Watts
Ec1 for Ib = 10 μa (Approx.)	-14 Volts

QUICK REFERENCE DATA

Sylvania Type 6677/6CL6 is designed specifically for mobile operation. It is a T-6½ beam power pentode intended for use as an R-F power oscillator or amplifier.

Type 6677/6CL6 possesses electrical characteristics essentially equivalent to Type 6CL6.



SYLVANIA ELECTRONIC TUBES

A Division of
Sylvania Electric Products Inc.

RECEIVING TUBE OPERATIONS EMPORIUM, PA.

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File Under
RECEIVING TUBES

SPECIAL TESTS AND RATINGS

Heater-Cycling Life Tests

Statistical sample operated for 2000 cycles to evaluate and control heater-cathode defects. Conditions of test include $E_f = 7.5$ volts cycled for one minute on and one minute off. $E_b + E_{c3} + E_{c2} + E_{c1} = 0$ volts and $E_{hk} = 135$ volts with heater positive with respect to cathode.

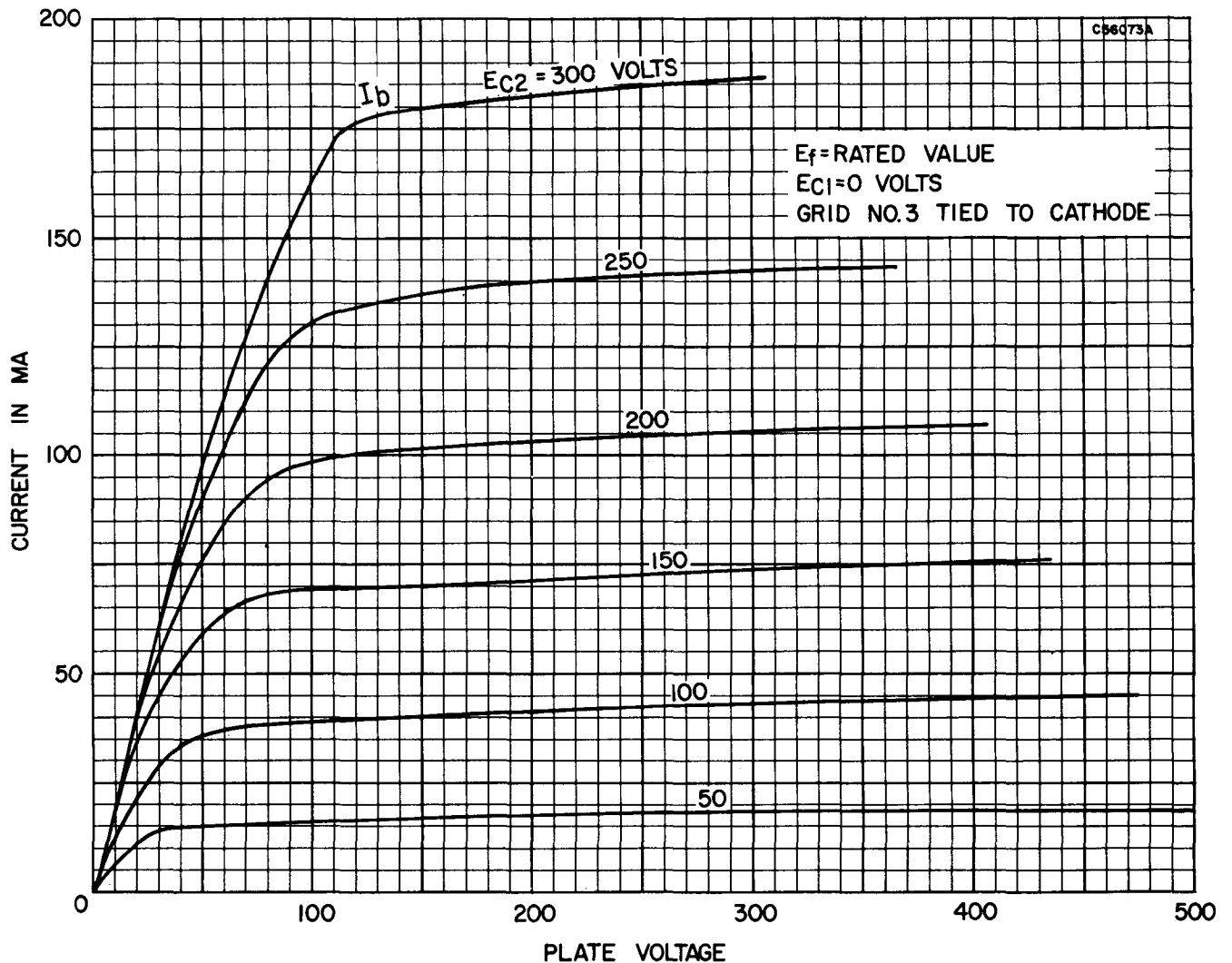
Average Transconductance at Reduced Heater Voltage 8800 μ mhos

$E_f = 5.0$ volts, $E_b = 250$ volts, $E_{c3} = 0$ volts, $E_{c2} = 150$ volts and
 $E_{c1} = -3.0$ volts.

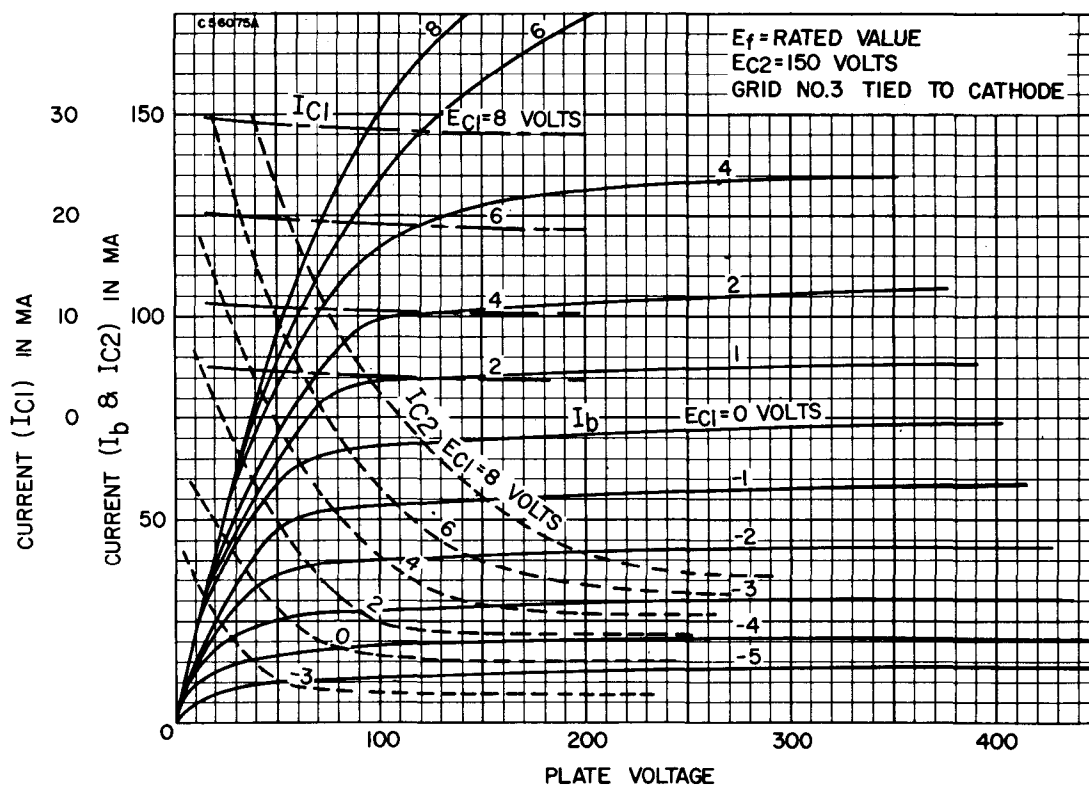
NOTES:

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.

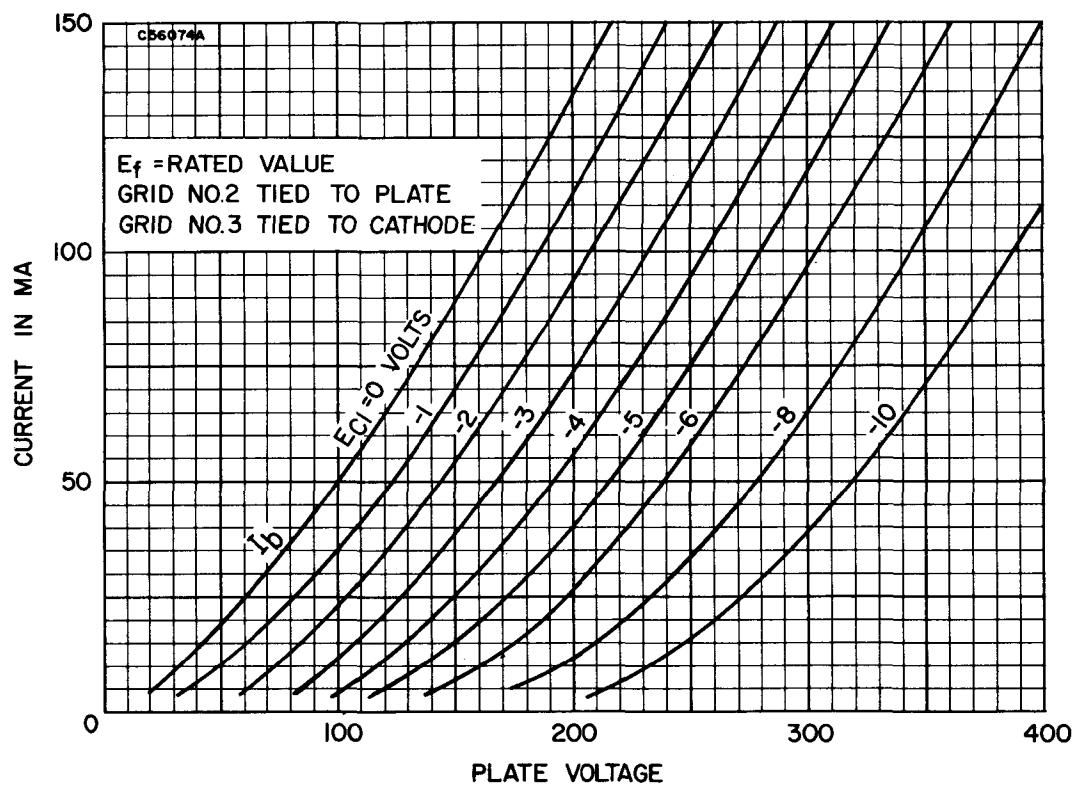
AVERAGE PLATE CHARACTERISTICS



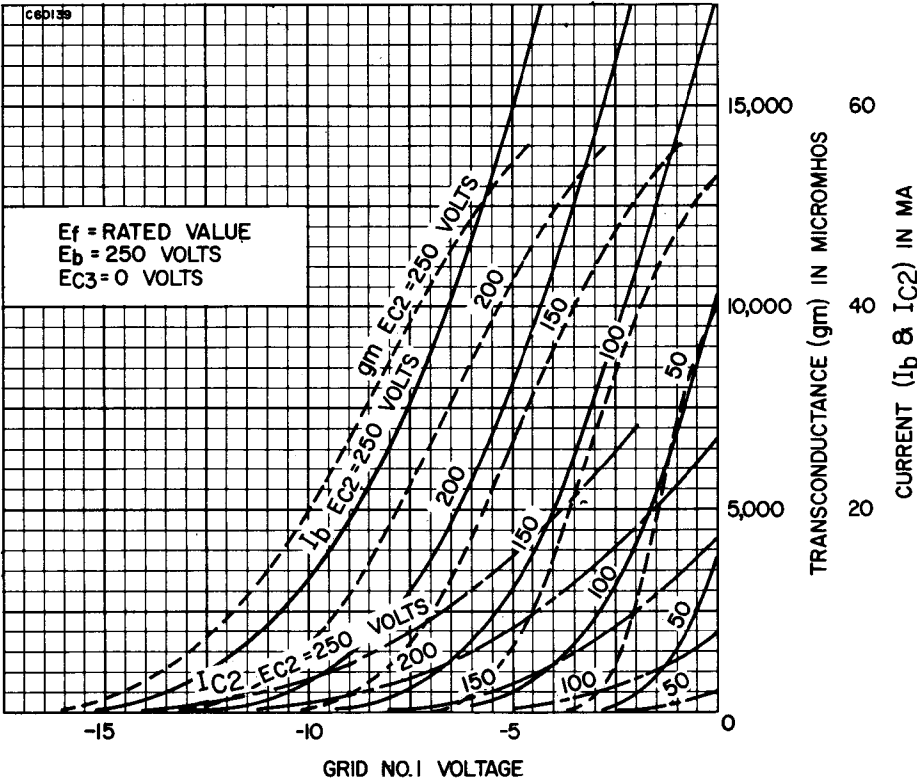
AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS (Triode Connected)



AVERAGE TRANSFER CHARACTERISTICS



RATING CHART

