

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. |

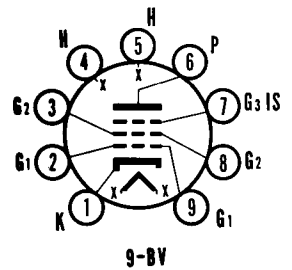
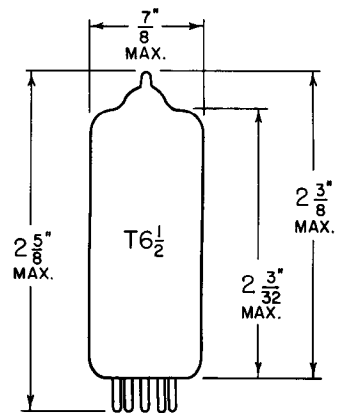
CHARACTERISTICS

| | |
|---|-------------------------|
| 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 |
| E _{c1} for I _b = 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.

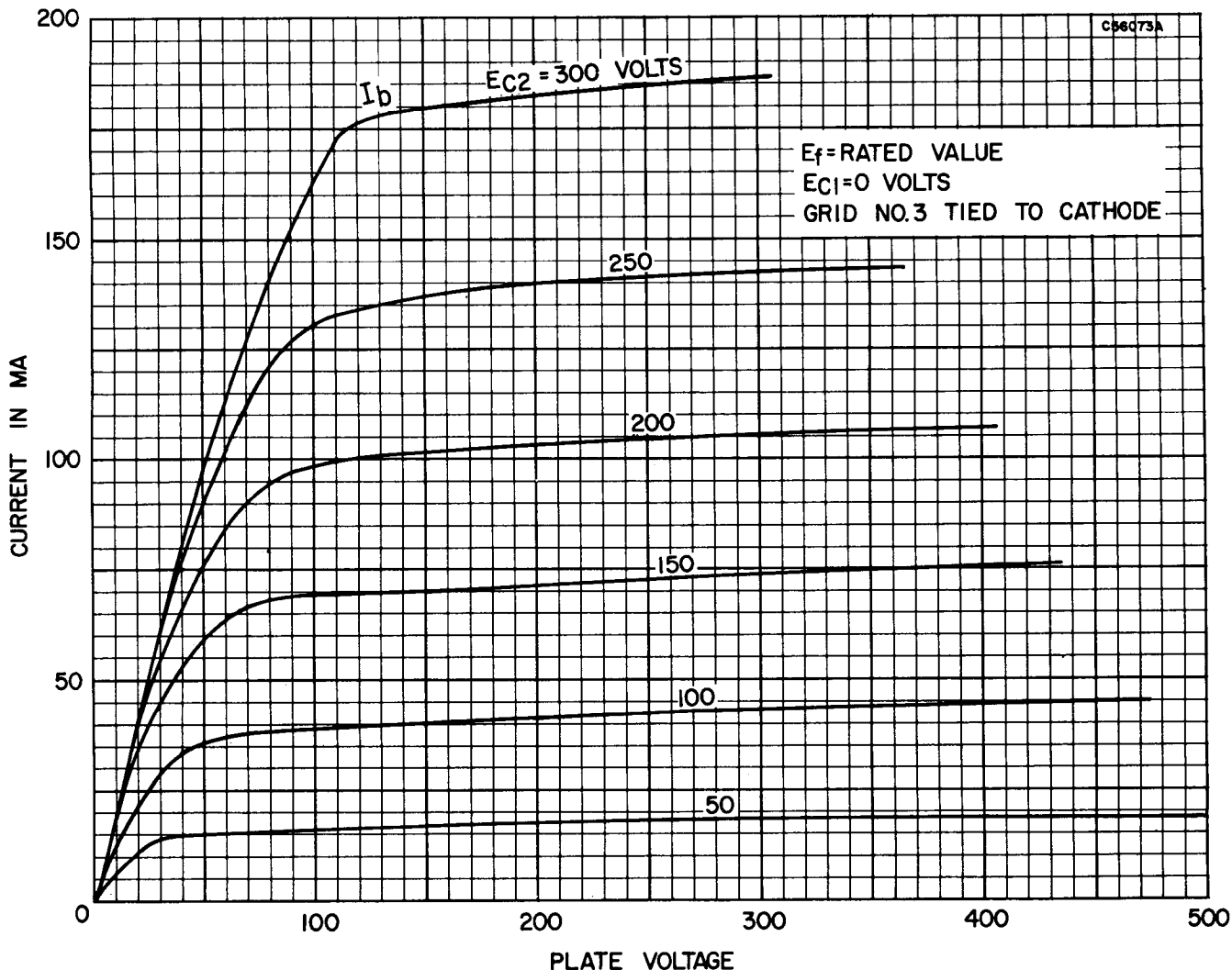
Average Transconductance at Reduced Heater Voltage 8800 μ mhos

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

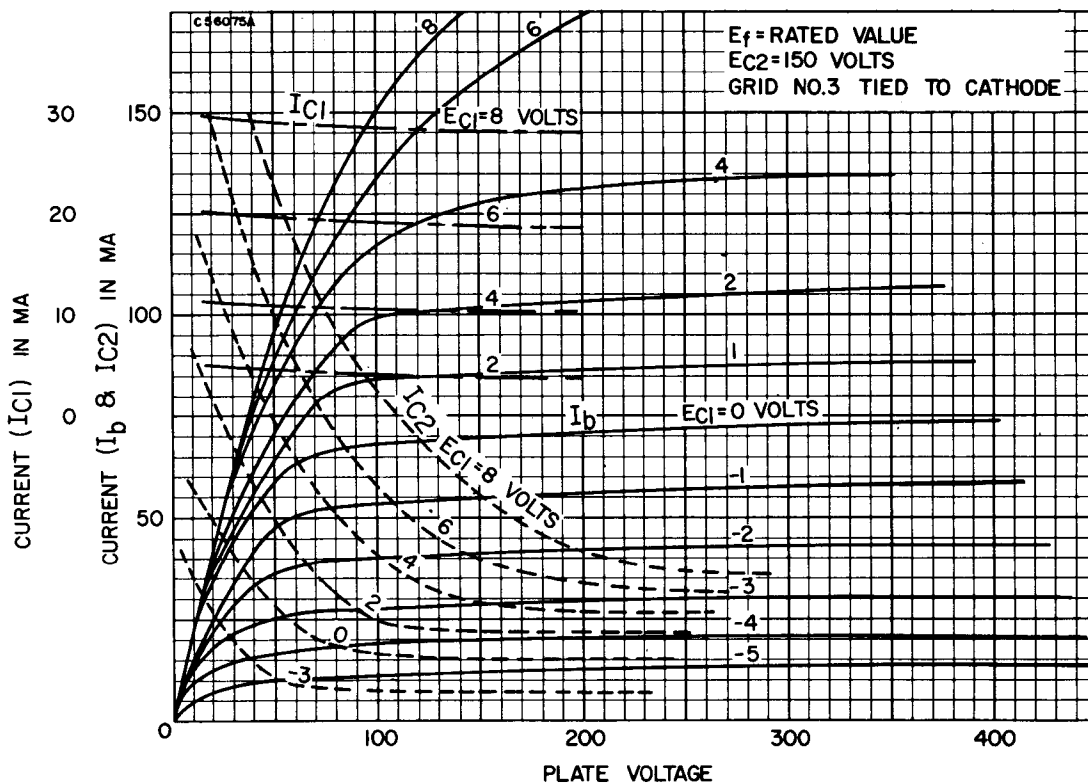
NOTES:

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.

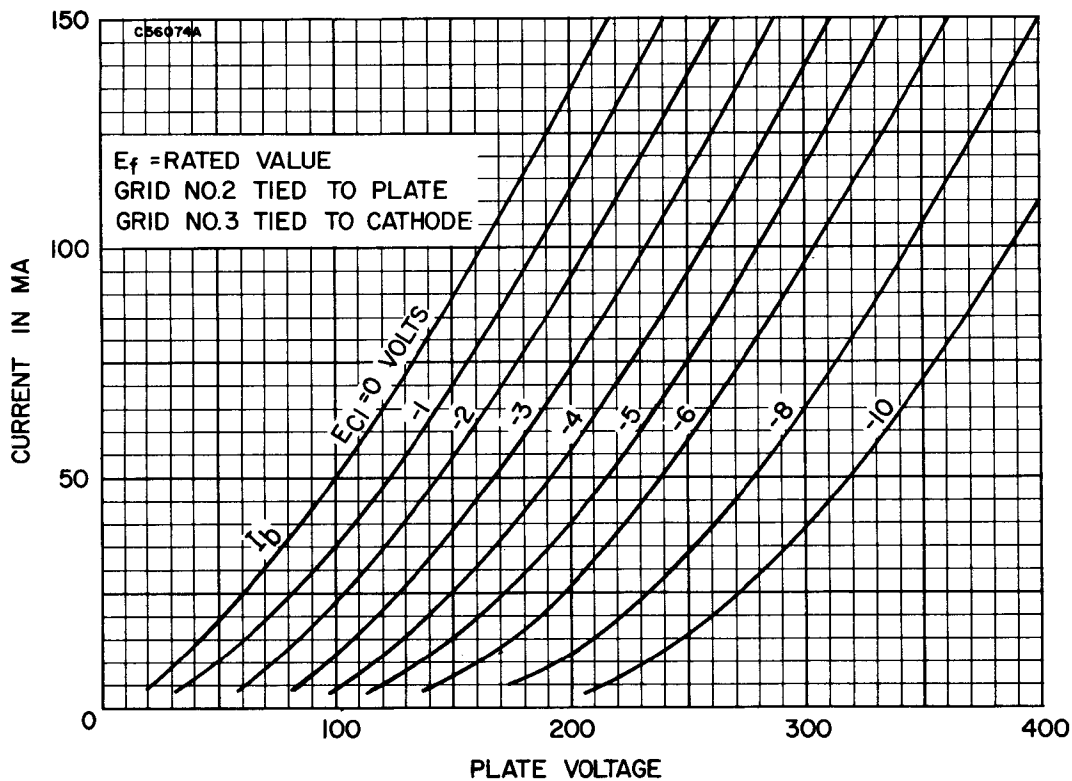
AVERAGE PLATE CHARACTERISTICS



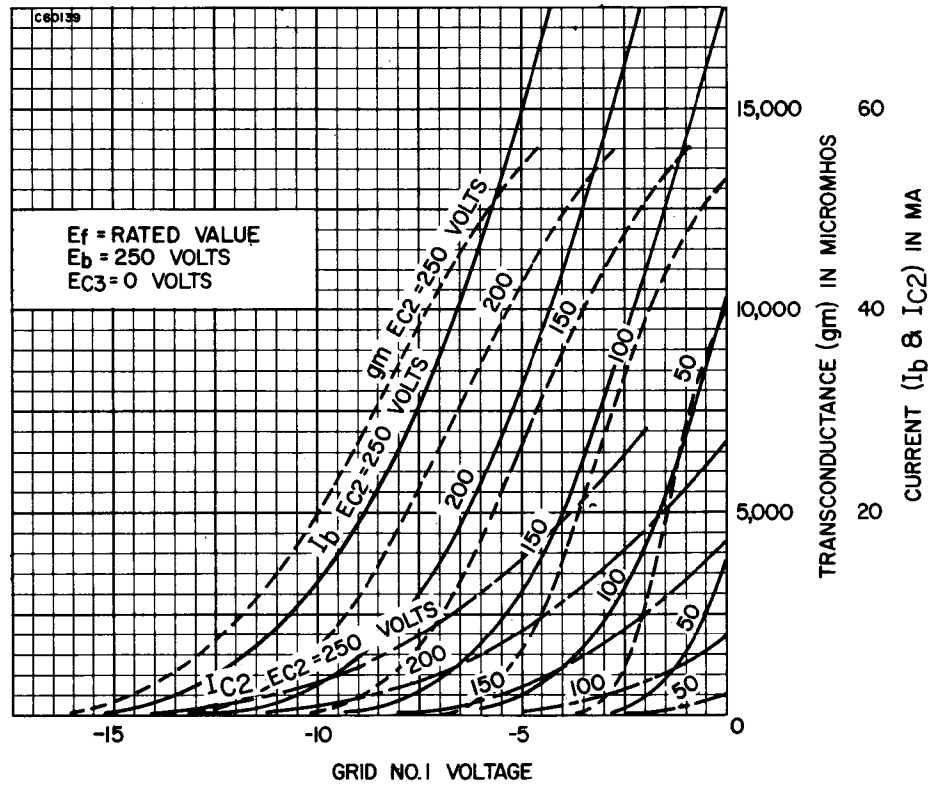
AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS
(Triode Connected)



AVERAGE TRANSFER CHARACTERISTICS



RATING CHART

