

Sylvania

TYPE 1Q6 DIODE PENTODE

RATINGS AND CHARACTERISTICS

| | | |
|--------------------------------|------|-------|
| Filament Voltage | 1.25 | Volts |
| Maximum Plate Voltage | 100 | Volts |
| Maximum Screen Voltage | 100 | Volts |
| Maximum Cathode Current | 2.0 | Ma. |
| Maximum Diode Drop for 0.5 Ma. | 10 | Volts |

| | | |
|-------------------------------------|------------|-----------------------------|
| Direct Interelectrode Capacitances: | Unshielded | Shielded* |
| Cgp | 0.12 | 0.085 $\mu\mu\text{f.}$ |
| Cin | 1.60 | 1.80 $\mu\mu\text{f.}$ |
| Cout | 2.00 | 4.20 $\mu\mu\text{f.}$ |
| Cgl-d | 0.15 | 0.15 $\mu\mu\text{f.}$ Max. |

*With 0.405" Diameter Shield Connected to Negative Filament

OPERATING CONDITIONS AND CHARACTERISTICS

| | | | |
|------------------------|--------|--------|------------------|
| Filament Voltage DC | 1.25 | 1.25 | Volts |
| Filament Current | 0.04 | 0.04 | Ampere |
| Plate Voltage | 30 | 67.5 | Volts |
| Screen Voltage | 30 | 67.5 | Volts |
| Grid Voltage | 0 | 0 | Volts |
| Plate Current | .33 | 1.6 | Ma. |
| Screen Current | .09 | 0.4 | Ma. |
| Plate Resistance | 0.5 | 0.4 | Megohm |
| Mutual Conductance | 330 | 600 | μmhos |
| Voltage Gain (approx.) | 30 (1) | 60 (2) | |

- (1) With $R_{c2} = 2.2$ megohms $R_b = 1.0$ megohms $R_{c1} = 4.7$ megohms
 (2) With $R_{c2} = 3.9$ megohms $R_b = 1.0$ megohms $R_{c1} = 4.7$ megohms

CIRCUIT APPLICATION

Sylvania Type 1Q6 is a diode audio pentode tube suitable for use in very small radio sets or amplifiers. The other types required for a normal set complement and designed for use with it are Types 1C8 (Converter), 1W5 (RF Pentode Amplifier) and 1V5 (Output Pentode).

This type corresponds in service and circuit design to Types 1LD5 and 1S5 but is rated for use at lower voltages. The gains are comparable considering the reduced size and voltages. For a diode load curve, reference should be made to that given for Sylvania Type 1LD5.

The tinned leads permit direct soldering into the circuit and permit great reduction in size of completed equipment. The small size and light weight permit use under severe mechanical conditions and in locations where larger tubes could not be considered.

COMMERCIAL ENGINEERING DEPARTMENT
 Sylvania Electric Products Inc., Emporium, Pennsylvania
 PRINTED IN USA

PHYSICAL SPECIFICATIONS

| | |
|---------------------|----------------|
| Style | T-3 |
| Base | Flexible Leads |
| Bulb | T-3 |
| Diameter | 0.400" Max. |
| Lead Length | 1.25" Min. |
| Overall Bulb Length | 1.5" Max. |
| Mounting Position | Any |

BASE PIN CONNECTIONS

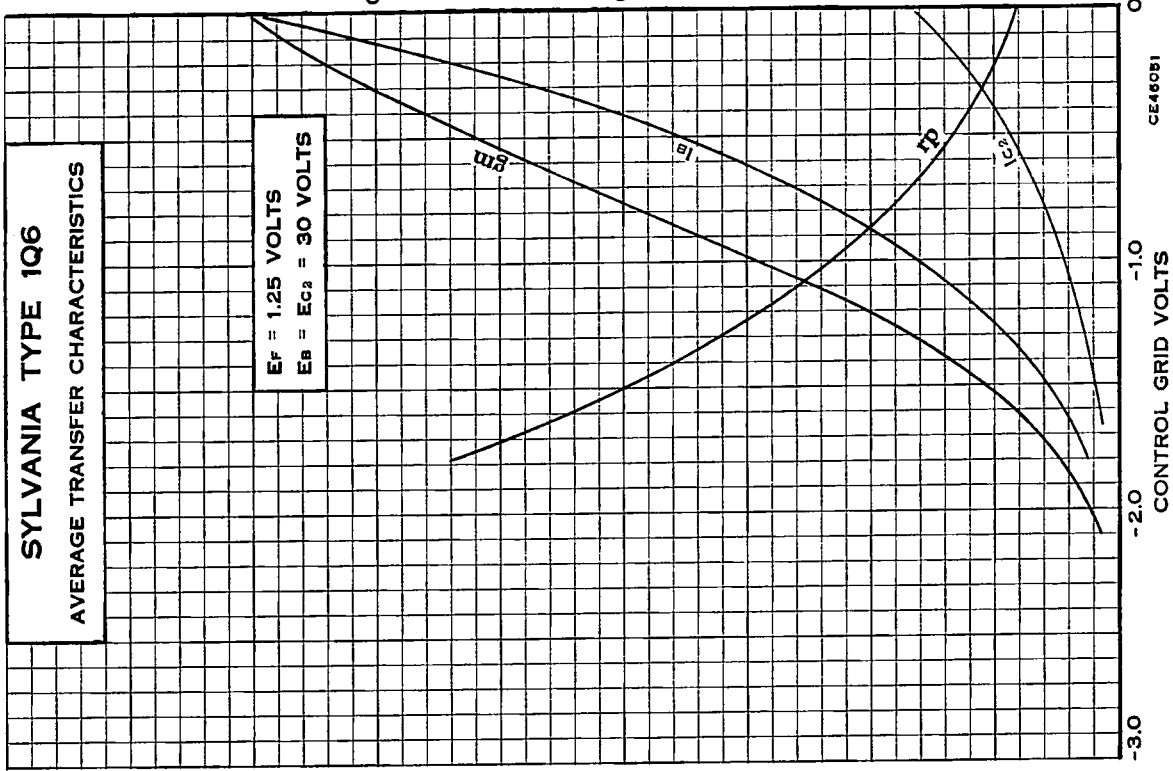
- Pin 1 - No Connection
 - Pin 2 - Control Grid
 - Pin 3 - No Connection
 - Pin 4 - Neg. Fil. & Supp.
 - Pin 5 - Positive Filament
 - Pin 6 - Diode Plate
 - Pin 7 - Pentode Plate
 - Pin 8 - Screen Grid
- RMA Basing 8C0-0-0

from RMA release #467A,
 Jan. 31, 1947

SYLVANIA TYPE 1Q6

AVERAGE TRANSFER CHARACTERISTICS

$E_f = 1.25$ VOLTS
 $E_b = E_{c2} = 30$ VOLTS



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AVERAGE TRANSFER CHARACTERISTICS

$E_f = 1.25$ VOLTS
 $E_b = E_{c2} = 67.5$ VOLTS

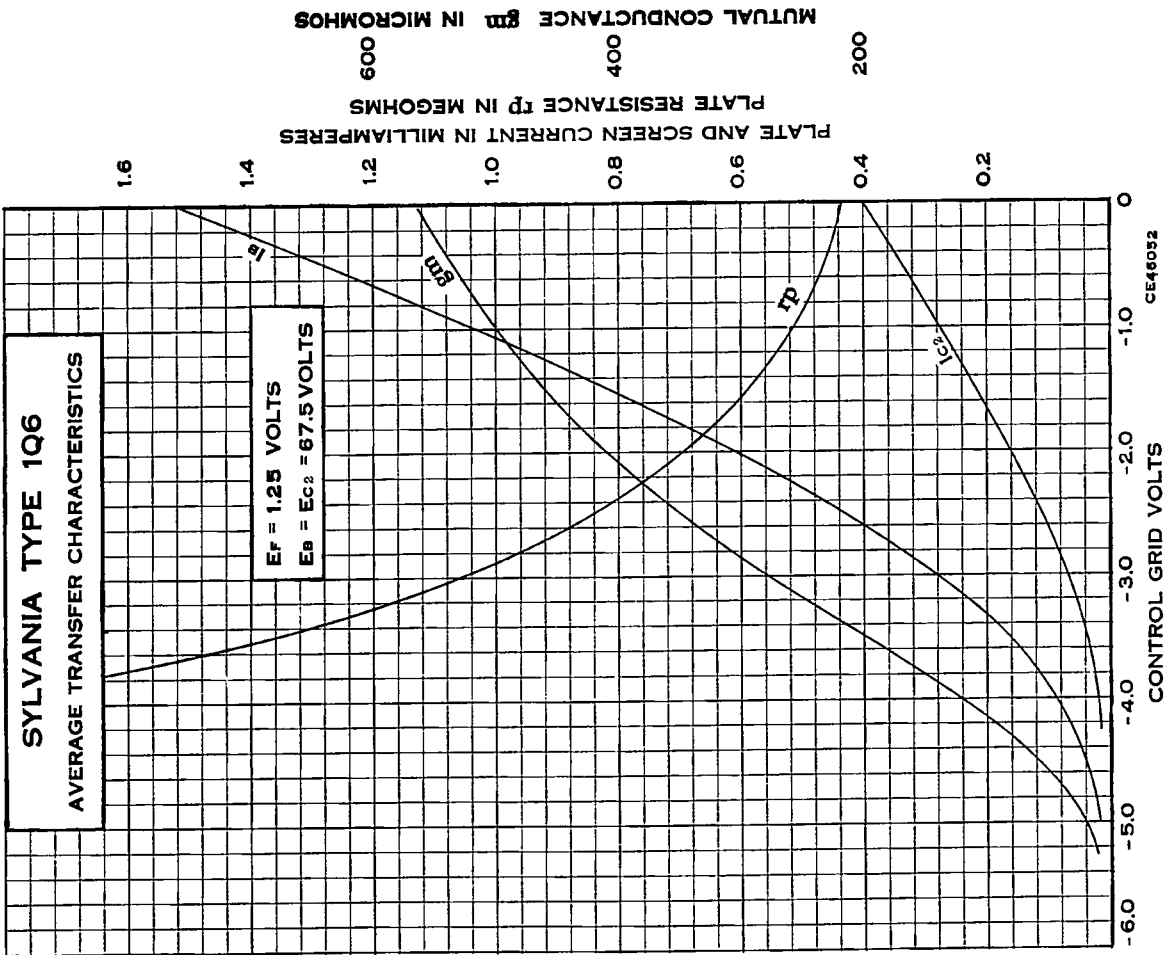


PLATE AND SCREEN CURRENT IN MILLIAMPERES

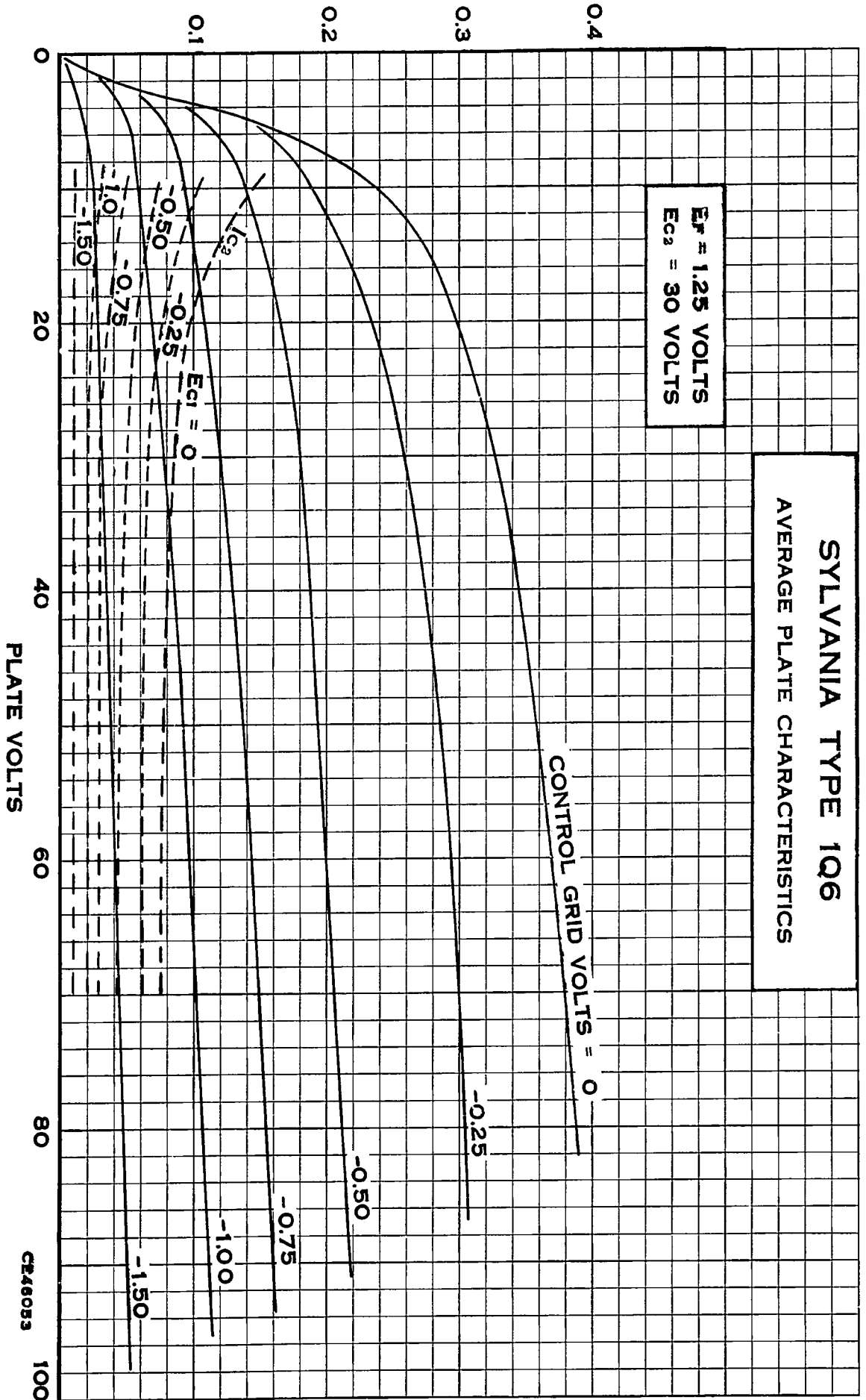


PLATE AND SCREEN CURRENT IN MILLIAMPERES

