

Hygrade Sylvania

CORPORATION

TECHNICAL DATA

SYLVANIA TYPE 1E4G

Triode

RATINGS AND CHARACTERISTICS

Filament Voltage (Nominal)	1.4	Volts
Filament Current (Nominal)	0.05	Ampere

Direct Interelectrode Capacitances:

C_{g-p}	2.4	$\mu\mu F$
C_{g-f}	2.4	$\mu\mu F$
C_{p-f}	6.0	$\mu\mu F$

OPERATING CONDITIONS AND CHARACTERISTICS

Filament Voltage	1.4	1.4	Volts
Plate Voltage	90	90	Volts
Grid Voltage*	0	-3	Volts
Plate Current	4.5	1.5	Ma.
Plate Resistance	11,000	17,000	Ohms
Mutual Conductance	1325	825	$\mu\mu\text{hos}$
Amplification Factor	14.5	14	

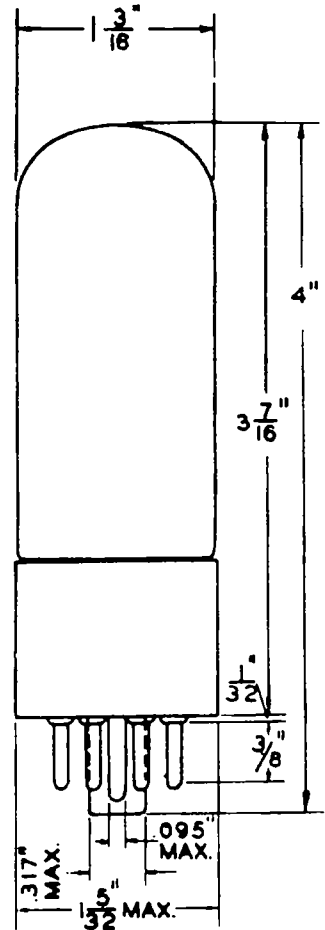
*Negative Filament Return Pin No. 7.

CIRCUIT APPLICATION

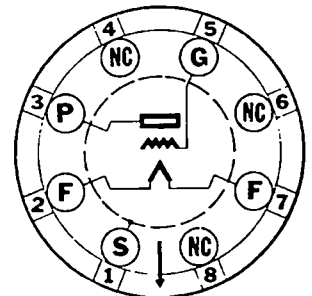
Sylvania Type 1E4G is a new general purpose triode designed for use in low drain battery operated receivers. The electrical characteristics make it especially desirable for use as an oscillator.

The filament is rated at a nominal voltage of 1.4 volts and 50 milliamperes. However, the tube may be operated directly from a suitable 1.5 volt dry battery without the use of a ballast tube, since the design provides satisfactory performance over the useful voltage range normally encountered during the life of the battery. Other forms of A batteries are applicable if the proper circuit arrangements are provided. The grid return should be made to the negative filament terminal.

SYLVANIA
1E4G



TUBE AND BASE DIAGRAM
(BOTTOM VIEW)



RMA RELEASE #160A

HYGRADE SYLVANIA CORPORATION

TECHNICAL DATA

SYLVANIA TYPE 1B4G

General Purpose Triode

Physical Specifications

Base	Small Octal 7-Pin
Bulb	T9-B
Maximum Diameter	1 5/32"
Maximum Overall Length	4"
Maximum Seated Height	3 7/16"

Mounting Position

Any

Base Connections

RMA Basing No. 5S-0-0

Pin #1 - No Connection	#5 - Grid
#2 - Filament	#6 - No Connection
#3 - Plate	#7 - Filament
#4 - No Connection	#8 - No Connection

RATINGS

Direct Interelectrode Capacitances: *

Grid to Plate	2.4 uuf.
Input (Grid to Filament)	2.4 uuf.
Output (Plate to Filament)	6.0 uuf.

* With RMA tube shield MS-308 connected to negative filament.

Maximum Filament Voltage

Battery Operation-Voltage must never exceed	1.6 DC Volts
AC/DC Power Line Operation-Design Center	1.3 Volts
Maximum Plate Voltage	110 Volts

Operating Conditions and Characteristics

Filament Voltage	1.4	1.4 DC Volts
Filament Current	0.050	0.050 Ampere
Plate Voltage	90	90 Volts
Grid Voltage **	0	-3 Volts
Plate Current	4.5	1.4 Ma.
Plate Resistance	11200	19000 Ohms
Transconductance	1300	760 umhos
Amplification Factor	14.5	14.5

** Negative Filament Return Pin No. 7