

# engineering data service

# MECHANICAL DATA

Bulb .														T	-5 1/2
Base .						$\mathbf{E}$	7-1,	N	Iin	iat	ure	B	utto	n '	7-Pin
Outline															5-2
Basing															7FB
Cathode									(	Coa	ted	١U	nip	ote	ntial
Mountin															

### **ELECTRICAL DATA**

### HEATER CHARACTERISTICS

Heater Voltage <sup>1</sup>			
Heater-Cathode Voltage (Design Center Values) Heater Negative with Respect to Cathode Heater Positive with Respect to Cathode		30 Volts	Max. Max.

# DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid to Plate						$1.8 \mu\mu t$
Input: $g$ to $(h + k)$						2.2 μμf
Output: $p to (h + k)$ .						1.0 μμf
Diode Plate to Diode Plate						$1.0 \mu \mu f$

# RATINGS (Design Center Values)

Plate Voltage						30 Volts Max.
Cathode Current						20 Ma Max.
Grid Circuit Resistance						10 Megohms Max.
Average Diode Current						

## CHARACTERISTICS AND TYPICAL OPERATION

# Class A<sub>1</sub> Amplifier

Plate Voltage											12.6 Volts
Grid Voltage .											
Plate Current.											
Transconductano	e										1200 μmhos
Amplification Fa	acto	r									55
Plate Resistance											45000 Ohms
Average Diode (											
Applied (Ea	ich l	Dio	ode	:)2							2.0 Ma
Resistance Cou	plec	l A	m	pli	fier	•					
Plate Supply Vo	ltan	_									12.6 Volte

Resistance Coupled Amplifier												
Plate Supply Voltage	12.6 Volts											
Grid Resistor	1.0 Megohm											
Plate Load Resistor	1.0 Megohm											
Input Capacitor	0.02 μf											
Output Capacitor	0.01 μf											
Grid Resistor of Following Stage	2.0 Megohms											
Voltage Gain at 400 CPS <sup>4</sup>	16											

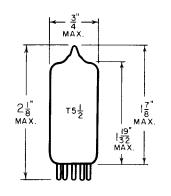
## **NOTES:**

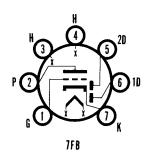
- 1. This tube is intended for use in automobile radios operated from a nominal 12 volt battery. Design of the tube is such that the heater will operate satisfactorily over the range 10.0 volts to 15.9 volts, and that the maximum ratings provide a safety factor for the wide voltage variation encountered with this type of supply.
- 2. Test condition only.
- 3. Contact potential developed across specified grid resistor.
- 4. Measured at an output voltage of 1.0 volt RMS.

# QUICK REFERENCE DATA

The Sylvania Type 12EL6 is a miniature double diode, high mu triode intended for use as a second detector audio amplifier.

It is designed for operation where the heater and plate voltages are supplied directly from a 12 volt automotive storage battery.





# SYLVANIA ELECTRIC PRODUCTS INC.

# RADIO TUBE DIVISION EMPORIUM, PA.

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# 12EL6

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# AVERAGE PLATE CHARACTERISTICS

