

MECHANICAL DATA

Bulb	T-6 1/2
Base	E9-1, Miniature Button 9-Pin
Outline	6-2
Basing	.9DE
Cathode	Coated Unipotential
Mounting Position	Any
Shock and Vibration	Note 1

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage	6.3 Volts
Heater Current	335 Ma
Maximum Heater-Cathode Voltage (Absolute Maximum Values)	
Heater Negative with Respect to Cathode	
Total DC and Peak	120 Volts
Heater Positive with Respect to Cathode	
Total DC and Peak	60 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

	Section 1	Section 2
Grid to Cathode + Heater	3.1	3.1 pf
Plate to Cathode + Heater	0.5	0.4 pf
Grid to Cathode + Heater + Shield	3.1	3.1 pf
Plate to Cathode + Heater + Shield	1.75	1.65 pf
Plate to Grid	1.4	1.4 pf
Plate to Cathode	0.18	0.18 pf
Plate to Shield	1.3	1.3 pf
Cathode to Heater	2.6	2.7 pf
	Between Sections	
Plate to Plate		.045 pf
Grid to Grid		.005 pf
Plate to Grid (Either Section)		.005 pf
Grid to Cathode (Either Section)		.005 pf

Grounded Grid Operation

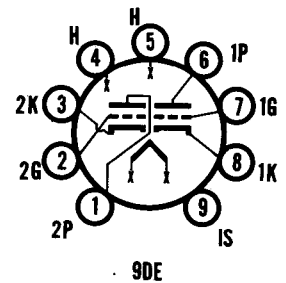
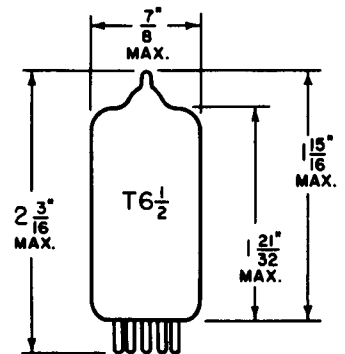
	Section 1	Section 2
Plate to Grid + Heater + Shield	3.0	2.9 pf
Cathode to Grid + Heater + Shield	6.0	6.0 pf

RATINGS (Absolute Maximum Values—Each Section)

Plate Voltage (Cold Cathode)	550 Volts
Plate Voltage (Ib = 0 Ma)	400 Volts
Plate Voltage	250 Volts
Plate Dissipation (Both Plates) Maximum	2.2 Watts
Plate Dissipation (Both Plates)	2.0 Watts
Plate Dissipation	1.65 Watts
Grid Dissipation	.03 Watts
Cathode Current	22 Ma
Peak Cathode Current ²	110 Ma
Negative Grid Voltage	110 Volts
Peak Negative Grid Voltage ²	200 Volts
Bulb Temperature	165 °C
Grid Circuit Resistance	
Fixed Bias	0.5 Megohm
Self Bias	1.0 Megohm

QUICK REFERENCE DATA

The Sylvania Type 7308 is a T-6 1/2 duo triode designed for use as a multivibrator, cathode follower, VHF amplifier and VHF cascode amplifier. Special features of the tube are: long life, ruggedized construction, high transconductance, and low noise and microphonics. The Sylvania 7308 is a special quality twin triode similar to the Sylvania Type 6922.



SYLVANIA ELECTRONIC TUBES

A Division of Sylvania Electric Products Inc.

RECEIVING TUBE OPERATIONS

EMPORIUM, PA.

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File Under RECEIVING TUBES

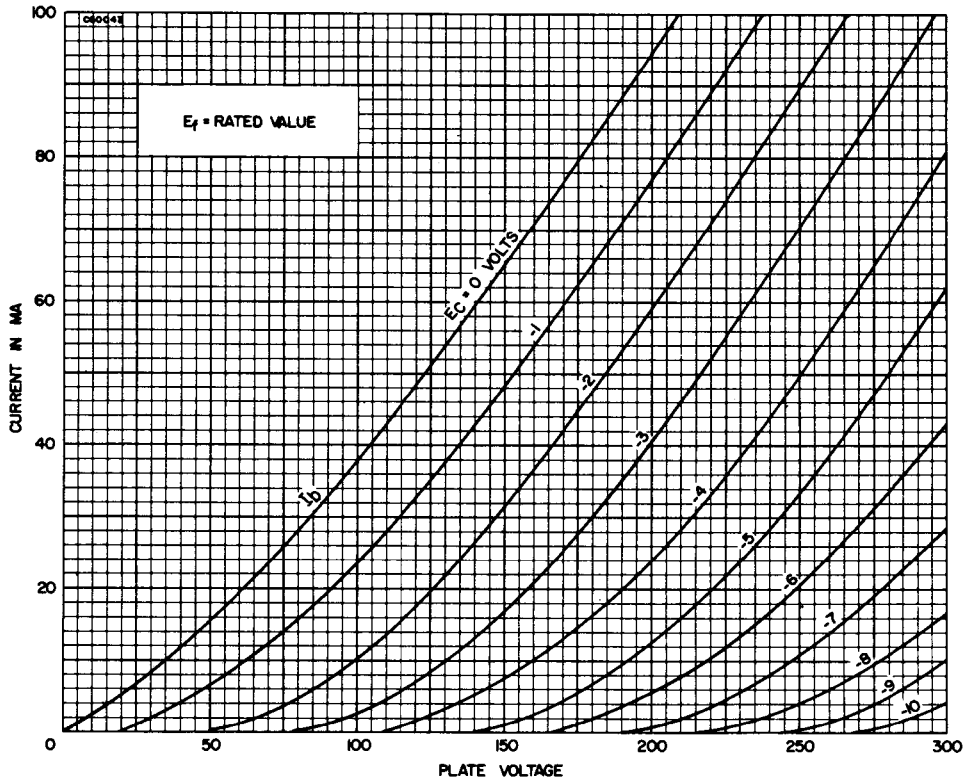
CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	100 ³	90 Volts
Grid Voltage	+9	0 Volts
Plate Current	15	12 Ma
Cathode Resistor	680	120 Ohms
Transconductance	12,500	11,500 μ mhos
Amplification Factor	33	—
Equivalent Noise Resistance ⁴	250	— Ohms
Noise Factor ⁵	4.6	— db
Input Damping (F = 100 mc/s)	3000	— Ohms

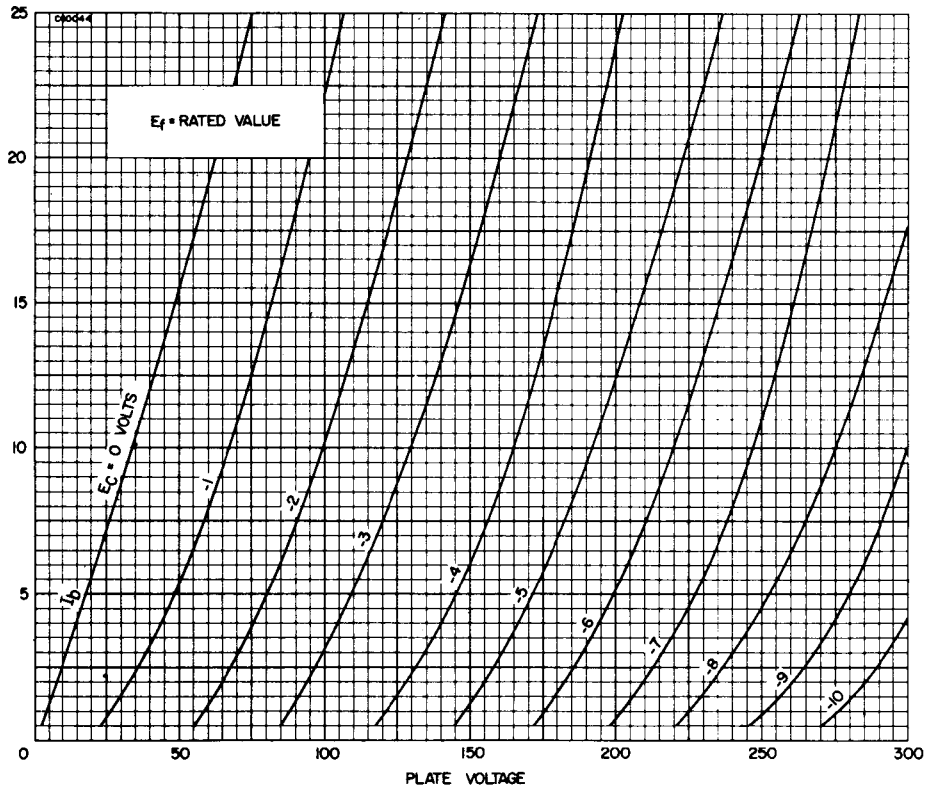
NOTES:

1. A shock rating of about 500 g was obtained by using the NRL impact machine to deliver 5 blows to the tube at an angle of 30° in each of four different directions.
A fatigue rating of 2.5 g was obtained by applying vibrational forces for 32 hours in each of three directions at a frequency of 50 cps. These conditions are given for evaluation of mechanical ruggedness. They are not to be interpreted as suitable operating conditions.
2. Pulse Duration, 200 μ sec. Max.; duty cycle 10 %.
3. Operation under conditions listed in this column is recommended because of the small spread in characteristics.
4. Measured at frequency = 45 mc/s.
5. Measured in a cascode circuit at frequency = 200 mc/s and matched for minimum noise.

AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS

