ADVANCE DATA

MECHANICAL DATA

Bulb	T-3
Base	E8-10, Subminiature Button Flexible Leads
Outline	JEDEC 3-3
Basing	8DL
Cathode	Coated Unipotential
Mounting Position	Any

RATINGS[1] (Absolute Maximum)

Bulb Temperature (per JEDEC JO-H1)	220°	C	
Altitude[2]	80000	Ft.	
Radiation			
Total Dosage (∫ neutrons/sq. cm/sec.)	10^{16}	nvt	
Dose Rate (neutrons/sq. cm/sec.)	10^{12}	nv	

DURABILITY CHARACTERISTICS[4]

Impact Acceleration (3/4 msec Duration)[5]	450	G	Max.
Fatigue (Vibrational Acceleration for Extended Periods)	2.5	G	Max.
On-Off Heater Cycles[7]	2000		Min.

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage[3]	26.5	V
Heater Current	110	mA

DIRECT INTERELECTRODE CAPACITANCES

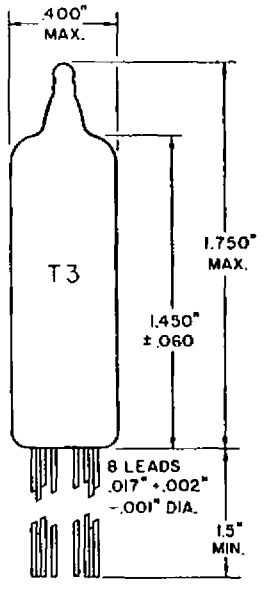
	Shielded[8]	Unshielded	
Grid No. 1 to Plate	0.11	0.15	μμf
Input	6.5	6.5	μμf
Output	7.5	4.5	μμf

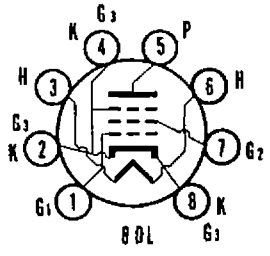
CONTROLLED DETRIMENTS

Interelectrode Insulation[9]	100	Meg	Min.
Total Grid Current[10]	-1.0	μAdc	Max.
Grid Emission[11]	-2.0	μAdc	Max.
Vibration Output[12] as equivalent Ec1	11.5	mVac	Max.
Heater-Cathode Leakage[13]	25	μAdc	Max.

QUICK REFERENCE DATA

The Premium Subminiature Type 7762 is a beam power pentode designed for use as an audio amplifier. It is intended for operation under conditions of severe shock, vibration, high temperature and high altitude. The Sylvania Type 7762 is manufactured and inspected to meet the applicable MIL-E-1 specification for reliable operation.





SYLVANIA
ELECTRONIC TUBES
A Division of
Sylvania Electric Products Inc.
RECEIVING TUBE
OPERATIONS
EMPORIUM, PA.

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July 6, 1960

146 (10-58)

from JEDEC release #2908, Aug. 1, 1960

RATINGS[1] (Absolute Maximum)

Heater Voltage[3]	26.5 (±10%)	V
Plate Voltage	165	Vdc
Peak Plate Forward Voltage[4]	330	v
Grid No. 2 Voltage	155	Vdc
Plate Dissipation	4.0	W
Grid No. 2 Dissipation	1.0	W
Cathode Current	50	mAdc
DC Grid No. 1 Voltage		
Positive Value	0	Vdc
Negative Value	55	Vdc
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode	200	v
Heater Negative with Respect to Cathode	200	v
Grid No. 1 Circuit Resistance		
Self Bias	0.5	Meg
Fixed Bias	0.1	Meg

CHARACTERISTICS

Plate Voltage	110	Vdc
Grid No. 2 Voltage	110	Vdc
Cathode Resistor	270	Ohms
Plate Current	30	mAdc
Grid No. 2 Current	2.2	mAdc
Transconductance	4200	µmhos
Plate Resistance	15000	Ohms
Grid Voltage for Ib = 100 µAdc	-40	Vdc
Power Output at Rl = 3000 ohms; Esig. = 6.4 Vac;	1.0	Watt

NOTES:

1. Limitations beyond which normal tube performance and tube life may be impaired.

2. If altitude rating is exceeded, reduction of instantaneous voltages (Ef excluded) may be required.

3. Tube life and reliability of performance are directly related to the degree of regulation of the heater voltage to its center rated value of 26.5 volts.

4. Tests performed as a measure of the mechanical durability of the tube structure.

5. Force as applied in any direction by the Navy Type High Impact (Flyweight) Shock Machine or Electronic Devices. Shock duration = 3/4 milliseconds.

6. Vibrational forces applied in any direction for a period of 96 hours.

7. One cycle consists of the application of Ef = 29.0 V for one minute and interruption of the filament voltage for four minutes. A voltage of Ehk = 140 Vac is applied continuously.

NOTES: (Cont'd)

8. External shield No. 318 connected to cathode.

9. Measure with Ef = 26.5 V; Eg-all = -100 Vdc; Ep-all = -300 Vdc; Cathode is positive so that no cathode emission occurs.

10. Measure with Ef = 26.5 V; Eb = Ec2 = 110 Vdc; Rk = 270 ohms.

11. Preheated for five minutes with Ef = 31.5 V; Eb = Ec2 = 100 Vdc; Rk = 220 ohms; Rg1 = 0.5 Meg; then tested with Ef = 31.5 V; Eb = Ec2 = 100 Vdc; Ec1 = -40 Vdc; Rg1 = 0.5 Meg.

12. Test with Ef = 26.5 V; Eb = Ec2 = 110 Vdc; Rk = 270 ohms; Ck = 100 μf; Rp = 2000 ohms; F = 40 cps; Acc = 15 g.

13. Measure with Ef = 26.5 V; Ehk = ± 100 Vdc.

14. Per MIL-E-1 Par. 6.5 and General Section of this Manual titled Specifications and Ratings.