ADVANCE DATA

MECHANICAL DATA

Bulb	T-3
Base	E8-10, Subminiature Button Flexible Leads
Outline	JEDEC 3-1
Basing	8DG
Cathode	Coated Unipotential
Mounting Position	Any

RATINGS[1] (Absolute Maximum)

Bulb Temperature (per JEDEC JO-H1)	220°	C
Altitude[2]	80,000	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]	750	G	Max.
Fatigue (Vibrational Acceleration for Extended Periods)[6]	2.5	G	Max.
On-Off Heater Cycles[7]	2,000		Min.

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage[3]	26.5	V
Heater Current	90	mA

DIRECT INTERELECTRODE CAPACITANCES

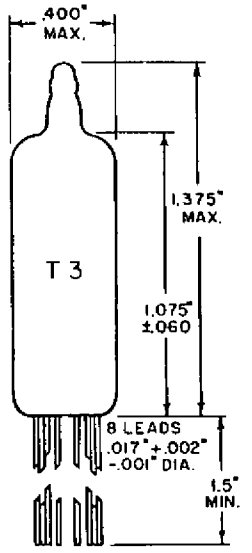
	Shielded[8]	Unshielded		
Grid to Plate (Each Section)	1.8	1.8	μμf	
Input (Each Section)	2.5	2.2	μμf	
Output				
Section No. 1	1.3	0.34	μμf	
Section No. 2	1.3	0.36	μμf	
Grid to Grid	0.013	0.015	μμf	Max.
Plate to Plate	0.30	0.45	μμf	Max.

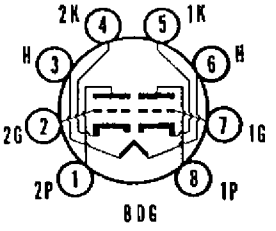
CONTROLLED DETRIMENTS

Interelectrode Insulation[9]	100	Meg	Min.
Total Grid Current[10]	-0.4	μAdc	Max.
Grid Emission[11]	-0.5	μAdc	Max.
Vibration Output[12] as equivalent Ecl	5.0	mVac	Max.
Heater-Cathode Leakage[13]	5	μAdc	Max.

QUICK REFERENCE DATA

The Premium Subminiature Type 7760 is a general purpose, medium mu, double triode having separate cathode connections for each section. It is particularly useful in oscillator and amplifier applications where power requirements permit the use of two tubes in one envelope.
The 7760 is designed to provide dependable operation under conditions of severe shock, vibration, high temperature and high altitude and is manufactured and inspected to meet the applicable MIL-E-1 specification for reliability.





SYLVANIA
ELECTRONIC TUBES
A Division of
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RECEIVING TUBE
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RATINGS[1] (Absolute Maximum)

Heater Voltage[3]	26.5 (±10%)	V
Plate Voltage	55	Vdc
Plate Current (Each Section)	22	mAdc
Grid Current (Each Section)	8.5	mAdc
Heater-Cathode Voltage		
Heater Positive with Respect to Cathode	100	v
Heater Negative with Respect to Cathode	100	v

CHARACTERISTICS (Each Section)

Plate Voltage	26.5	Vdc
Grid Resistor	2.2	Megohms
Plate Current	3.0	mAdc
Transconductance	5000	μmhos
Amplification Factor	20	
Grid Voltage for Ib = 50 μAdc	-3.5	Vdc

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 for 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.

8. External shield No. 318 connected to cathode.

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

10. Measure each section separately with Ef = 26.5 V; Eb = 50 Vdc; Ec = -1.5 Vdc.

11. Preheat each section separately for five minutes with Ef = 31.5 V; Eb = 26.5 Vdc; Rg = 2.2 Meg; then test each section separately with Ef = 31.5 V; Eb = 26.5 Vdc; Ec = 3.5 Vdc; Rg = 0.1 Meg.

12. Test each section separately with Ef = 26.5 V; Eb = 26.5 Vdc; Rg = 2.2 Megs; Cgl = 1 μf; Rp = 10,000 ohms; F = 40 cps; Acc = 15 g.

13. Measured with Ef = 26.5 V; Ehk = ± 100 Vdc; each section separately.