



ADVANCE DATA

MECHANICAL DATA

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

RATINGS¹ (Absolute Maximum)

Bulb Temperature	220 °C
Altitude ²	80,000 Ft.
Radiation	
Total Dosage (neutrons/sq. cm.)	10 ¹⁶ nvt
Dose Rate (neutrons/sq. cm./sec.)	10 ¹² nv

DURABILITY CHARACTERISTICS⁴

Impact Acceleration (3/4 msec Duration) ⁵	750 G	Max.
Fatigue (Vibrational Acceleration for Extended Periods) ⁶	10 G	Max.
On-Off Heater Cycles ⁷	2000	Min.

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage ³	26.5 V
Heater Current	45 mA

DIRECT INTERELECTRODE CAPACITANCES

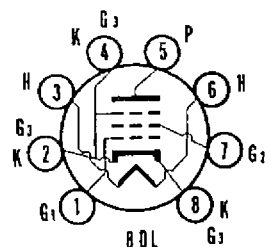
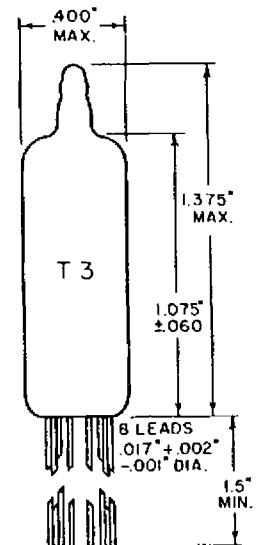
	Shielded ⁸	Unshielded	
Grid No. 1 to Plate	0.015	0.03	μuf Max.
Input	4.00	4.00	μuf
Output	3.40	1.90	μuf

CONTROLLED DETRIMENTS

Interelectrode Insulation ⁹	100 Meg	Min.
Total Grid Current ¹⁰	-0.3	μAdc Max.
Grid Emission ¹¹	-0.5	μAdc Max.
Vibration Output ¹² (As equivalent Ecl)	1.3	mVac Max.
Heater-Cathode Leakage ¹³	5	μAdc Max.

QUICK REFERENCE DATA

The Premium Subminiature Type 8064 is a semi-remote cutoff pentode featuring a 26.5 volt, 45 ma heater. It is intended primarily for use as an age controlled RF or IF amplifier at frequencies up to 400 mc. The 8064 is designed for dependable operation under conditions of severe shock, vibration, high temperature and high altitude, and is manufactured and inspected to meet the applicable specification for reliable operation.

SYLVANIA
ELECTRONIC TUBES

A Division of
Sylvania Electric Products Inc.

RECEIVING TUBE
OPERATIONS
EMPORIUM, PA.

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RATINGS¹ (Absolute Maximum)

Heater Voltage ³	26.5 ($\pm 10\%$)	V
Plate Voltage	165	Vdc
Peak Plate Forward Voltage ¹⁴	330	v
Grid No. 2 Voltage	155	Vdc
Plate Dissipation	1.1	W
Grid No. 2 Dissipation	0.55	W
Cathode Current	16.5	mAdc
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	1.1	Meg

CHARACTERISTICS

Plate Voltage	100	Vdc
Grid No. 2 Voltage	100	Vdc
Cathode Resistor	120	Ohms
Plate Current	7.2	mAdc
Grid No. 2 Current	2.0	mAdc
Transconductance	4500	μ hos
Plate Resistance	0.275	Meg
Ecl for Gm = 25 μ hos (75 μ hos Max.)	-14	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 or Electronic Devices. Shock duration = $3/4$ milliseconds.
6. Vibrational forces applied in any direction for a period of six hours, repeatedly sweeping the range from 30 cps to 3000 cps and back with the period of the sweep being three minutes. Heater voltage only shall be applied.

NOTES: Cont'd

7. One cycle consists of the application of $E_f = 29.0$ V for one minute and interruption of the filament voltage for four minutes. A voltage of $E_{hk} = 140$ Vac is applied continuously.
8. External shield No. 318 connected to cathode.
9. Measure with $E_f = 26.5$ V; $E_g\text{-all} = -100$ Vdc; $E_p\text{-all} = -300$ Vdc; Cathode is positive so that no cathode emission occurs.
10. Measure with $E_f = 26.5$ V; $E_b = E_{c2} = 150$ Vdc; $R_k = 390$ ohms.
11. Preheated for five minutes with $E_f = 31.5$ V; $E_b = E_{c2} = 100$ Vdc; $R_k = 120$ ohms; $R_{g1} = 1.0$ Meg; then tested with $E_f = 31.5$ V; $E_b = E_{c2} = 100$ Vdc; $E_{c1} = -14$ Vdc; $R_{g1} = 1.0$ Meg.
12. Test with $E_f = 26.5$ V; $E_b = E_{c2} = 100$ Vdc; $R_k = 120$ ohms; $CK = 1000$ μ f; $R_p = 10,000$ ohms; $F = 40$ cps; $Acc = 15$ g.
13. Measure with $E_f = 26.5$ V; $E_{hk} = \pm 100$ Vdc.
14. Per MIL-E-1 Par. 6.5 and General Section of this Manual titled Specifications and Ratings.