

MECHANICAL DATA

Bulb	T-5 1/2
Base	E7-1, Miniature Button 7-Pin
Outline	5-1
Basing	7DK
Cathode	Coated Unipotential
Mounting Position	Any

RATINGS¹

Operational Altitude	80,000 Ft.
Radiation Environment	
Total Dosage—(Neutrons/Sq. Cm)	10 ¹⁶ nvt
Dose Rate —(Neutrons/Sq. Cm/Sec.)	10 ¹² nv

DURABILITY CHARACTERISTICS²

Impact Acceleration ³	500 G
Vibration Acceleration for an Extended Period ⁴	2.5 G
On-Off Heater Cycles ⁵	2000

ELECTRICAL DATA

HEATER CHARACTERISTICS

Heater Voltage	6.3 Volts
Heater Current	225 mA
Maximum Heater-Cathode Voltage	100 Volts

CONTROLLED DETRIMENTS

Minimum Interelectrode Insulation ⁶	100 Megohms
Maximum Total Grid Current ⁷	-1.5 μ Adc
Maximum Vibration Output as Equivalent	
Grid Voltage ⁸	3.0 mVac
Maximum Heater-Cathode Leakage ⁹	10 μ Adc

DIRECT INTERELECTRODE CAPACITANCES

	Shielded ¹⁰	Unshielded
Grid to Plate	1.7	1.7 pf
Input: g to (h+k+sld)	3.3	2.9 pf
Output: p to (h+k+sld)	1.8	0.25 pf
Grounded Grid		
Input: k to (g+h+sld)	5.2	5.5 pf
Output: p to (g+h+sld)	3.0	1.8 pf
Heater to Cathode	2.9	3.0 pf

RATINGS¹ (Absolute Maximum Values)

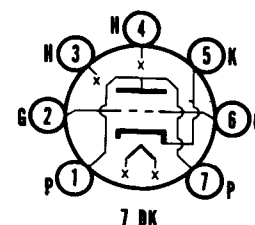
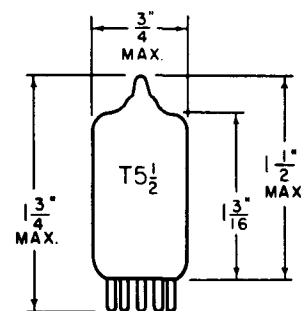
Heater Voltage Variation	± 10 % Volts
Plate Voltage	330 Vdc
Average Cathode Current	33 mAdc
Plate Dissipation	4.4 Watts
Grid Circuit Resistance	1.0 Megohm

AVERAGE CHARACTERISTICS

Conditions	
Heater Voltage	6.3 V
Plate Voltage	200 Vdc
Grid Voltage	0 Vdc
Cathode Resistor	100 Ohms
Plate Current	18 mAdc
Transconductance	10,750 μ mhos
Amplification Factor	55
Grid Voltage for Ib = 20 μ A (Approx.)	-7.0 Vdc

QUICK REFERENCE DATA

The Sylvania Type 8334 is a miniature high mu triode designed for use as a grounded grid amplifier in UHF applications. The tube is manufactured and inspected to meet the applicable Mil-E-1 specification.



SYLVANIA ELECTRONIC TUBES

A Division of
Sylvania Electric Products Inc.

RECEIVING TUBE OPERATIONS EMPORIUM, PA.

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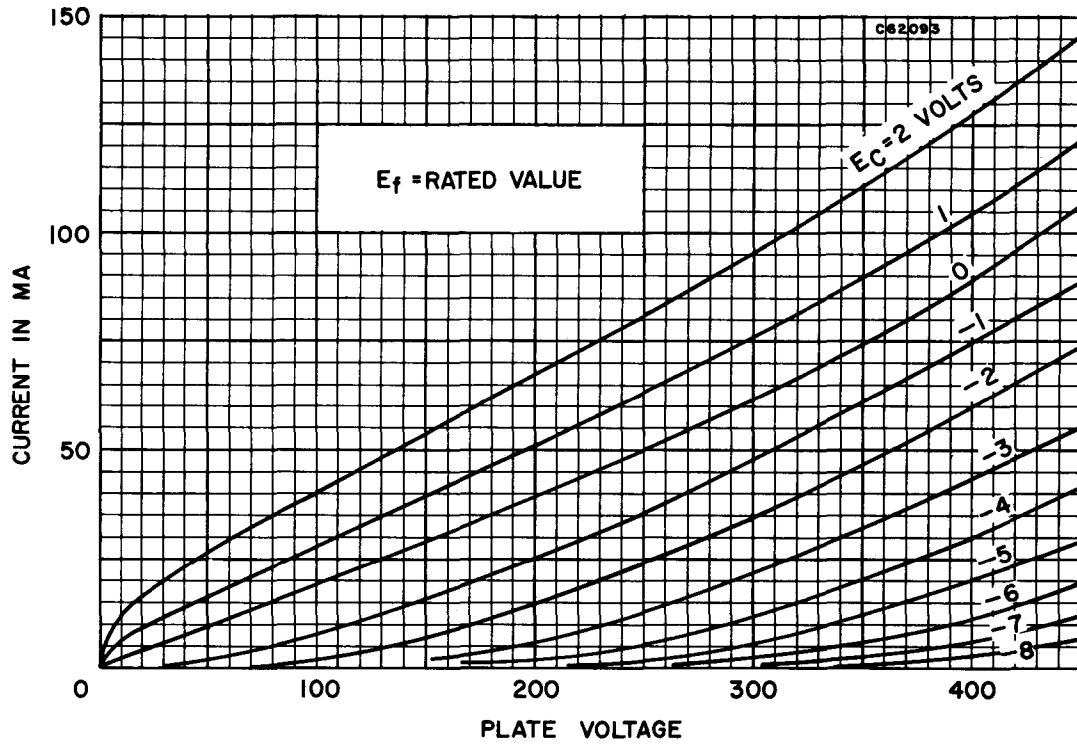
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RECEIVING TUBES

NOTES:

1. *Limiting values beyond which normal tube life and normal tube performance may be impaired.*
2. *Tests performed as a measure of the mechanical durability of the tube structure.*
3. *Force as applied in any direction by the Navy Type High Impact (Flyweight) Shock Machine for Electronic Devices. Shock duration = $\frac{3}{4}$ milliseconds.*
4. *Vibrational forces applied in any direction for a period of 96 hours.*
5. *One cycle consists of the application of $E_f = 7.5$ V for one minute and interruption of the filament voltage for four minutes. A voltage of $E_{hk} = 140$ Vac is applied continuously.*
6. *Measure with $E_f = 6.3$ V $E_{g-all} = -100$ Vdc; $E_{p-all} = -300$ Vdc; Cathode is positive so that no cathode emission occurs.*
7. *Measure with $E_f = 6.3$ V; $E_b = 250$ Vdc; $E_c = 0$ Vdc; $R_k = 250$ Ohms.*
8. *Test with $E_f = 6.3$ V; $E_b = 200$ Vdc; $E_c = 0$ Vdc; $R_k = 100$ Ohms; $R_p = 2,000$ Ohms; $F = 25$ cps; $Acc = 2.5$ G; $C_k = 1,000$ μ f.*
9. *Measure with $E_f = 6.3$ V; $E_{hk} = \pm 100$ Vdc.*
10. *Capacitances are measured with External Shield No. 316.*

AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS

