

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid No. 3 to Plate (Each Section)	2.0 Pf
Grid No. 1 to All	6.0 Pf
Grid No. 3 (Each Section) to All	3.6 Pf
Plate (Each Section) to All	3.0 Pf
Grid No. 3 (Section 1) to Grid No. 3 (Section 2) (Max.)	0.015 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage (Each Section) (Max.)	300 Volts
Grid No. 2 Voltage (Max.)	150 Volts
Positive DC Grid No. 3 Voltage (Each Section) (Max.)	3.0 Volts
Negative DC Grid No. 3 Voltage (Each Section) (Max.)	50 Volts
Peak Positive Grid No. 3 Voltage (Each Section) (Max.)	50 Volts
Negative DC Grid No. 1 Voltage (Max.)	50 Volts
Plate Dissipation (Each Section) (Max.)	1.1 Watts
Grid No. 2 Dissipation (Max.)	0.75 Watt
DC Cathode Current (Max.)	12 Ma
Grid No. 1 Circuit Resistance (Max.)	0.5 Megohm
Grid No. 3 Circuit Resistance (Each Section) (Max.)	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Both Sections Operating

Plate Voltage (Each Section)	100	100 Volts
Grid No. 2 Voltage	67.5	67.5 Volts
Grid No. 3 Voltage (Each Section)	-10	0 Volt
Grid No. 1 Voltage	Note 1	Note 1
Plate Current (Each Section)	—	2.0 Ma
Grid No. 2 Current	7.0	4.4 Ma
Cathode Current	7.1	8.5 Ma

MAXIMUM PLATE CURRENT RATIO (Balance)

Eb = 100 V, Ec2 = Ec1 = 67.5 V, Ec3 = 0, Rg1 = 0.68 Megohms 1.3 to 1

Each Section Operating Separately with Plate and Grid No. 3 of Opposite Section Grounded

Plate Voltage	100	100 Volts
Grid No. 2 Voltage	67.5	67.5 Volts
Grid No. 3 Voltage	0	0 Volt
Grid No. 1 Voltage	0	Note 1
Plate Current	—	2.0 Ma
Grid No. 3 Transconductance	—	450 μ mhos
Grid No. 1 Transconductance	1100	— μ mhos
Ec3 for Ib = 100 μ a (Approx.)	—	-3.5 Volts
Ec1 for Ib = 100 μ a (Approx.)	—	-2.3 Volts

NOTE:

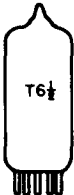
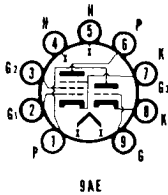
(1) Grid current adjusted for 100 μ a dc.

BURST AMPLIFIER and
GENERAL PURPOSE AMPLIFIER

6MU8
8MU8

Medium Mu Triode and
Semi-Remote Cutoff Pentode

Construction	Miniature T-6 $\frac{1}{2}$
Base	E9-1
Basing	.9AE
Outline	6-3
Maximum Diameter	0.875 In.
Maximum Seated Height	2.375 In.
Maximum Overall Height	2.625 In.



ELECTRICAL DATA

HEATER OPERATION

	6MU8	6MU8	8MU8
Heater Voltage	6.3	6.3	8.4 Volts
Heater Current	600	600	450 Ma
Heater Warm-up Time	—	11	11 Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
Total DC and Peak			200 Volts
Heater Positive with Respect to Cathode			
DC			100 Volts
Total DC and Peak			200 Volts

DIRECT INTERELECTRODE CAPACITANCES

	With Shield	Without Shield
Triode Section		
Grid to Plate	2.2	2.2 pf
Input: g1 to (Tk + Pk + Pg3 + IS + h)	3.2	3.0 pf
Output: p to (Tk + Pk + Pg3 + IS + h)	3.4	2.2 pf
Pentode Section		
Grid No. 1 to Plate (Max.)	0.05	0.05 pf
Input: g1 to (k + g3 + IS + g2 + h).....	9.0	9.0 pf
Output: p to (k + g3 + IS + g2 + h).....	4.4	3.6 pf
Heater to Cathode (Triode Section)	4.8	4.4 pf
Heater to Cathode (Pentode Section)	7.5	5.5 pf
Pentode Grid No. 1 to Triode Plate (Pg1 to Tp) (Max.)	0.20	0.170 pf
Pentode Plate to Triode Plate (Pp to Tp) (Max.)	0.008	0.090 pf

RATINGS (Design Maximum Rating System)
Class A1 Amplifier

	Triode Section	Pentode Section
Plate Voltage (Max.)	330	330 Volts
Grid No. 2 (Screen-Grid) Supply Voltage (Max.)	—	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Grid No. 1 (Control-Grid) Voltage: Positive Bias (Max.)	0	0 Volt
Grid No. 2 Dissipation (Max.)	—	1.1 Watts
Plate Dissipation (Max.)	2.5	3.75 Watts
Maximum Grid No. 1 Circuit Resistance		
Fixed-Bias	0.5	0.25 Megohm
Cathode-Bias	1.0	1.0 Megohm
Control grid to cathode spacing of the pentode section of this type is of such low order of magnitude as to preclude the use of voltage between these elements of more than 30 volts dc or peak ac in commercial tube checkers and shorts indicating devices, particularly where mechanical excitation of the tube is employed.		

CHARACTERISTICS AND TYPICAL OPERATION
Class A1 Amplifier

	Triode Section	Pentode Section
Plate Voltage	125	150 Volts
Grid No. 2 Voltage	—	150 Volts
Grid No. 1 Voltage	—1	— Volts
Cathode Bias Resistor	—	150 Ohms
Plate Current	11.5	19 Ma
Grid No. 2 Current	—	4.2 Ma
Transconductance	6000	9000 μ mhos
Amplification Factor	35	—
Plate Resistance (Approx.)	5800	165,000 Ohms
Ec1 for Ib = 10 μ a (Approx.)	—5.8	— Volts
Ec1 for Ib = 20 μ a (Approx.)	—	—9.5 Volts

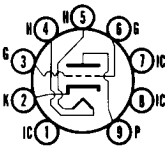
6S4A

Color Television Type

VERTICAL DEFLECTION
AMPLIFIER

Medium Mu Triode

Construction	Miniature T-6½
Base	Button 9 Pin, E9-1
Basing	9AC
Outline	6-3
Maximum Diameter	0.875 In.
Maximum Seated Height	2.375 In.
Maximum Overall Height	2.625 In.



9 AC



ELECTRICAL DATA
HEATER OPERATION

Heater Voltage	6.3 Volts
Heater Current	600 Ma
Heater Warm-up Time	11 Seconds