Color Television Type

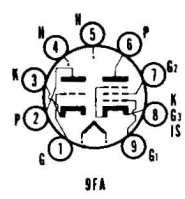
BURST AMPLIFIER (P) VIDEO AMPLIFIER (T)

6MB8

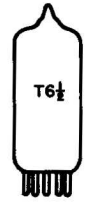
5MB8

Medium Mu Triode and Sharp Cutoff Pentode

Construction .....Miniature T-6½
Base .....Button 9 Pin, E9-1
Basing 9FA
Outline 6-2
Maximum Diameter .....0.875 In.
Maximum Seated Height .....1.938 In.
Maximum Overall Height .....2.185 In.



9FA



ELECTRICAL DATA

HEATER OPERATION

	5MB8	6MB8
Heater Voltage	4.5	6.3 Volts
Heater Current	450	400 Ma
Heater Warm-up Time	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 (Shielded)

Triode Section	
Grid to Plate	1.4 Pf
Input: g1 to (Tk + Pk + Pg3 + IS + h)	2.2 Pf
Output: p to (Tk + Pk + Pg3 + IS + h)	1.9 Pf
Pentode Section	
Grid No. 1 to Plate (Max.)	0.015 Pf
Input: g1 to (k + g3 + IS + g2 + h)	5.5 Pf
Output: p to (k + g3 + IS + g2 + h)	3.4 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	280	280 Volts
Grid No. 2 Supply Voltage (Max.)	—	280 Volts
Grid No. 2 Pulse Voltage (Max.)(1)	—	300 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Cathode Current (Max.)	20	20 Ma
Plate Dissipation (Max.)	2.0	2.0 Watts
Grid No. 2 Dissipation (Max.)	—	0.5 Watt
Positive Grid No. 1 Voltage (Max.)	0	0 Volt
Maximum Grid No. 1 Circuit Resistance		
Self Bias (Max.)	0.5	0.25 Megohm
Fixed Bias (Max.)	1.0	0.5 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 and 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	125 Volts
Grid No. 2 Voltage	—	125 Volts
Grid No. 1 Voltage	0	0 Volt
Cathode Bias Resistor	68	33 Ohms
Plate Current	13	10 Ma
Grid No. 2 Current	—	2.8 Ma
Transconductance	8000	12,000 μmhos
Amplification Factor	40	—
Plate Resistance (Approx.)	5000	125,000 Ohms
Ec1 for Ib = 100 μa	-5	— Volts
Ec1 for Ib = 50 μa	—	-3 Volts

NOTE:

(1) Rating determined at television horizontal deflection sweep frequency of 15,750 Hertz.