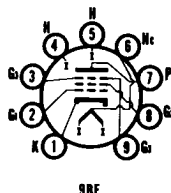


Color Television Type

VIDEO AMPLIFIER**12HL7****Sharp Cutoff Pentode**

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

**ELECTRICAL DATA****HEATER OPERATION**

	Parallel	Series
Heater Voltage.....	12.6	6.3 Volts
Heater Current	300	600 Ma
Heater Warm-up Time ⁽¹⁾	—	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 (Unshielded)

Grid No. 1 to Plate	0.15 Pf
Input: g1 to (k + g3 + IS + g2 + h).....	15.0 Pf
Output: p to (k + g3 + IS + g2 + h).....	6.0 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage (Max.)	400 Volts
Positive DC Grid No. 3 Voltage (Max.)	0 Volt
Grid No. 2 Supply Voltage (Max.)	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)
Positive DC Grid No. 1 Voltage (Max.)	0 Volt
Plate Dissipation (Max.)	10.0 Watts
Grid No. 2 Dissipation (Max.)	1.0 Watt
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	0.1 Megohm
Cathode Bias (Max.)	0.25 Megohm

Control grid to cathode spacing on this type is of such low order of magnitude as to preclude the use of voltage between these elements of more than 50 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

Plate Voltage	250 Volts
Grid No. 2 Supply Voltage.....	150 Volts
Grid No. 1 Voltage	0 Volt
Grid No. 3 Voltage (Referred to Negative End of Rk).....	0 Volt
Cathode Resistor (Bypassed)	122 Ohms
Plate Current	25 Ma
Grid No. 2 Current	6 Ma
Transconductance (Grid No. 1 to Plate).....	21,000 μ mhos
Plate Resistance (Approx.)	55,000 Ohms
Grid No. 1 Voltage (Approx.) for Ib = 100 μ a (Rk = 0)	-7.2 Volts

INSTANTANEOUS PLATE KNEE CHARACTERISTICS⁽²⁾

Eb = 50 V, Ec2 = 125 V, Ec1 = 0 V and Ec3 = 0 V
 Ib = 76 Ma, and Ic2 = 32 Ma

NOTES:

- (1) Applies to 6.3 volt connection only.
- (2) Current drawn only for short intervals so as not to damage the tube.