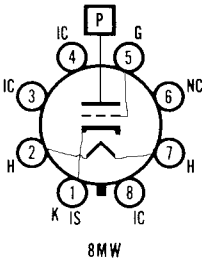


6BK4C/6EL4A

Color Television Type
SHUNT VOLTAGE REGULATOR

Sharp Cutoff Beam Pentode

- Construction Octal T-12
- Base B8-71 or B8-118
- Top Cap Small C1-1 or C1-34
- Basing 8MW
- Outline 12-36
 - Maximum Diameter 1.720 In.
 - Maximum Seated Height 4.438 In.
 - Maximum Overall Height 5.000 In.



ELECTRICAL DATA
HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current	200 Ma
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	450 Volts
Heater Positive with Respect to Cathode	Not Recommended

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Grid to Plate	1.0 Pf
Input	2.6 Pf
Output (Max.).....	1.0 Pf

RATINGS (Design Maximum Rating System)

Voltage Control Service

DC Plate Voltage (Abs. Max.)	27,000 Volts
Unregulated DC Supply Voltage (Abs. Max.)	60,000 Volts
Grid Voltage	
DC (Max.)	-135 Volts
Peak (Max.) ⁽¹⁾	-440 Volts
DC Plate Current (Abs. Max.)	1.6 Ma
Plate Dissipation (Max.)	40 Watts
Grid Circuit Resistance (Abs. Max.) ⁽²⁾	3 Megohms

CHARACTERISTICS AND TYPICAL OPERATION

Shunt Voltage Regulator

Unregulated Supply	
DC Voltage.....	36,000 Volts
Equivalent Resistance	11 Megohms
Voltage Divider Values	
R1 (5 Watts).....	220 Megohms
R2 (2 Watts).....	1 Megohm
R3 (½ Watt)	0.82 Megohm
Reference Voltage Supply	
DC Value.....	200 Volts
Equivalent Resistance	1000 Ohms
Effective Grid-Plate Transconductance	200 μmhos
DC Plate Current	
For Load Current of 0 Ma	1000 μa
For Load Current of 1 Ma	45 μa
Regulated DC Output Voltage	
For Load Current of 0 Ma	25,000 Volts
For Load Current of 1 Ma	24,500 Volts
Amplification Factor	2000

X-RADIATION CHARACTERISTIC

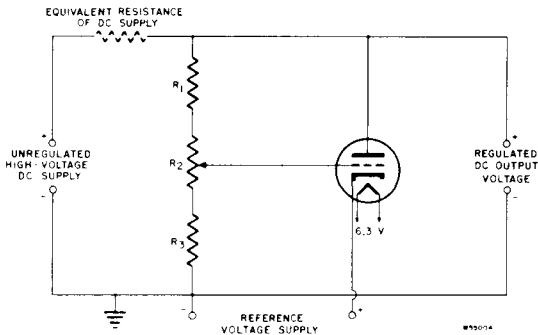
Maximum X-Radiation ⁽³⁾	1.5 mR/h
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NOTES:

- (1) Peak value for maximum of 20 seconds during equipment warm-up.
- (2) With flyback transformer high voltage supply.
- (3) Statistical value controlled on a lot sampling basis

X-RADIATION WARNING: The high voltages associated with this tube type result in the production of X-radiation which may constitute a health hazard on prolonged exposure at close range unless the tube is adequately shielded. Precautions must be exercised during the servicing of equipment to assure that all shielding components are replaced to their intended positions before the equipment is operated.

SHUNT REGULATOR CIRCUIT



TRANSFER CHARACTERISTICS (6BK4C/6EL4A)

