2EG4

HIGH-MU TRIODE

Nuvistor type used as a grounded-cathode, neutralized
rf amplifier in vhf tuners of television and FM rec-
ivers. Outlines section, 1; requires nuvistor socket.

Heater Voltage (ac/dc) ........................................ 1.7 volts
Heater Current .................................................. 0.6 ampere
Heater Warm-up Time (Average) ................................ 8 seconds
Peak Heater-Cathode Voltage .................................. ±100 volts

Direct Interelectrode Capacitances (Approx.):
Grid to Plate .................................................... 0.92 pF
Grid to Cathode, Heater, and Shell ......................... 4.3 pF
Plate to Cathode, Heater, and Shell ....................... 1.8 pF
Plate to Cathode .............................................. 0.18 pF
Heater to Cathode ............................................. 1.6 pF

Class A, Amplifier

MAXIMUM RATINGS (Design-Maximum Values)
Plate Supply Voltage ........................................ 300 volts
Plate Voltage ................................................... 135 volts
Grid Voltage:
Negative-bias value ......................................... 55 volts
Positive value .................................................. 0 volts
Plate Dissipation ............................................. 1.5 watts
Cathode Current ................................................. 15 mA

CHARACTERISTICS AND TYPICAL OPERATION

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MAXIMUM CIRCUIT VALUES

Grid-Circuit Resistance:* 2.2 megohms
For fixed-bias operation 0.5 megohms

* A plate supply voltage of 300 volts may be used provided that a sufficiently large resistor is
used in the plate circuit to limit the plate dissipation to 1.5 watts under any condition of
operation.

* For operation at metal-shell temperatures up to 135° C.
Refer to chart at end of section.  
Refer to chart at end of section.  
Refer to type 6FH5.  
Refer to chart at end of section.  
For replacement use type 2GK5/2FQ5A.  
Refer to type 6FS5.  
Refer to chart at end of section.  
Refer to type 6GK5.  
Refer to chart at end of section.  
For replacement use type 2FS5.  
For replacement use type 2HM5/2HA5.  
Refer to type 6HM5/6HA5.  
Refer to type 6HQ5.  
Refer to chart at end of section.

HALF-WAVE VACUUM RECTIFIER

Miniature type used in high-voltage rectifier circuits of small-screen black-and-white television receivers. Outlines section, 7A; requires miniature 9-contact socket. Socket terminals 1, 3, 4, 6, and 7 may be connected to terminal 9 or to a corona shield which connects to terminal 9. Terminals 3 and 7 may be used as tie points at or near cathode potential. For high-voltage and X-ray safety considerations, refer to page 93.

Heater Voltage (ac/dc) ........................................ 3.15 volts  
Heater Current .................................................. 0.22 ampere  
Direct Interelectrode Capacitance:  
Plate to Cathode, Heater, and Internal Shield ................. 1 pF

Pulsed Rectifier

For operation in a 525-line, 30-frame system

MAXIMUM RATINGS (Design-Maximum Ratings)

Peak Inverse Plate Voltage# .................................. 20000 volts  
Peak Plate Current ........................................... 80 mA  
Average Plate Current ....................................... 1.5 mA  
Heater Voltage:  
Absolute-maximum value .................................. 3.65 volts  
Absolute-minimum value ................................. 2.65 volts  

CHARACTERISTIC, Instantaneous Value

Tube Voltage Drop for plate current of 7 mA .................. 70 volts

X-RADIATION CHARACTERISTIC

X-Radiation, Maximum:  
Statistical value controlled on a lot sampling basis ........ 0.5 mR/hr  
# Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).  
*The dc component must not exceed 18000 volts.  
Caution—Operation of this tube outside of the maximum values indicated above may result in either temporary or permanent changes in the X-radiation characteristic of the tube. Equipment design must be such that these maximum values are not exceeded.