Half-Wave Vacuum Rectifier

GENERAL DATA

Electrical:
Heater Characteristics and Ratings (Design-Maximum Values):
Voltage (AC or DC) ......................... 6.3 ± 0.6 volts
Current at heater volts = 6.3 ................ 1.600 amp
Peak heater-cathode voltage:
Heater negative with respect to cathode .......................... 5500<sup>b</sup> max. volts
Heater positive with respect to cathode .......................... 300<sup>c</sup> max. volts
Direct Interelectrode Capacitances (Approx.):
Plate to cathode and heater .................. 8.5 μf
Cathode to plate and heater .................. 11.5 μf
Heater to cathode .............................. 4 μf

Mechanical:
Operating Position ......................................... Any
Type of Cathode ........................................... Coated Unipotential
Maximum Overall Length .............................. 3-13/16"
Maximum Seated Length .............................. 3-1/4"
Maximum Diameter ....................................... 1-9/32"
Bulb ...................................................... T9
Bases (Alternates):
Intermediate-Shell Octal with External Barriers:
5-Pin, Arrangement 2 (JEDEC Group 1, No. B5-147)
Short Intermediate-Shell Octal with External Barriers:
5-Pin, Arrangement 2 (JEDEC Group 1, No. B5-85)
Basing Designation for BOTTOM VIEW ................. 4CG

Pin 2 – Do Not Use<sup>e</sup>
Pin 3 – Cathode
Pin 5 – Plate
Pin 7 – Heater
Pin 8 – Heater

DAMPER SERVICE

Maximum Ratings, Design-Maximum Values:
For operation in a 525-line, 30-frame system<sup>f</sup>
PEAK INVERSE PLATE VOLTAGE<sup>a</sup> ......................... 5500 max. volts
PEAK PLATE CURRENT ...................................... 1200 max. ma
DC PLATE CURRENT ........................................ 190 max. ma
PLATE DISSIPATION ........................................ 6.5 max. watts

Characteristics, Instantaneous Value:
Tube Voltage Drop for plate ma. = 250 ................ 25 volts
a. This rating is applicable when the duty cycle of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

b. The dc component must not exceed 900 volts.

c. The dc component must not exceed 100 volts.

d. Without external shield.

e. Socket terminals 1, 2, 4, and 6 should not be used as tie points.