Full-Wave Vacuum Rectifier

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:
Heater, for Unipotential Cathode:
   Voltage (AC or DC).......... 6.3 volts
       Current .................. 1 amp

Mechanical:
Operating Position.............. Any
Maximum Overall Length .......... 3-1/16"
Maximum Seated Length .......... 2-13/16"
Length, Base Seat to Bulb Top (Excluding tip) . 2-7/16" ± 3/32"
Diameter ........................ 0.750" to 0.875"
Dimensional Outline .............. See General Section
Bulb .................................. T6-1/2
Base .................................. Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW ............... 9M

Pin 1 - Plate No.1
Pin 2 - No Connection
Pin 3 - Cathode
Pin 4 - Heater
Pin 5 - Heater
Pin 6 - No Connection
Pin 7 - Plate No.2
Pin 8 - No Connection
Pin 9 - No Connection

FULL-WAVE RECTIFIER

Maximum Ratings, Design-Center Values:
PEAK INVERSE PLATE VOLTAGE ........ 1000 max. volts
AC PLATE SUPPLY VOLTAGE PER PLATE (RMS):
   With capacitor-input to filter ........ 350 max. volts
PEAK PLATE CURRENT PER PLATE ......... 450 max. ma
DC OUTPUT CURRENT .................. 150 max. ma
HOT-SWITCHING TRANSIENT PLATE CURRENT
   PER PLATE:
   Even occasional hot-switching with capacitor-input circuits
   permits the flow of plate current having magnitudes which can
   adversely affect the life and reliability of tubes. If capa-
   citor-input circuits are to be used, protect the circuits
   against possible adverse effects of hot-switching by the use
   of a circuit arrangement which will limit the maximum peak
   current value per plate to a value of 1 ampere during the
   initial cycles of the hot-switching transient.
PEAK HEATER-CATHODE VOLTAGE:
   Heater negative with respect to cathode.. 500 max. volts
6CA4

Typical Operation:

With capacitor input to filter

AC Plate-To-Plate Supply
  Voltage (RMS) .................. 500  600  700  volts
Filter-Input Capacitor ..........  50  50  50  μf
Total Effective Plate-Supply
  Impedance Per Plate ..........  150  200  240  ohms
DC Output Voltage at Input to
  Filter (Approx.) for dc output
  ma. = 150 ..................  245  293  347  volts
AVERAGE PLATE CHARACTERISTIC
Each Unit

OPERATION CHARACTERISTICS
Capacitor Input to Filter

CASE 6.3 VOLTS
SUPPLY FREQUENCY (CPS) = 60
CAPACITOR INPUT TO FILTER = 50 + F
TOTAL EFFECTIVE PLATE-SUPPLY IMPEDANCE
PER PLATE

CURVE

OHMS 150 200 240

DC OUTPUT VOLTS AT INPUT TO FILTER

DC LOAD MILLIAMPERES