Half-Wave Vacuum Rectifier

7-PIN MINIATURE TYPE
With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:
Heater*, for Unipotential Cathode:
Voltage (AC or DC):
  Entire heater (Pins 3 and 4) ........... 36 volts
  Tap-section (Pins 3 and 6) ........... 32 volts
Current:
  Tap-section (Pins 3 and 6) ........... 0.1 ± 6% amp
  Warm-up time (Average) ............. 20 sec

Mechanical:
Operating Position .................. Any
Maximum Overall Length ............. 2-5/8"
Maximum Seated Length .............. 2-3/8"
Length, Base Seat to Bulb Top (Excluding tip) ... 2" ± 3/32"
Diameter .................................. 0.650" to 0.750"
Dimensional Outline .................. See General Section
Bulb ..................................... .75-1/2
Base ...................................... Small-Button Miniature 7-Pin (JEDEC No.E7-1)
                                      Basing Designation for BOTTOM VIEW ........ 5BQ

Pin 1 - No Connection
Pin 2 - No Connection
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Plate
Pin 6 - Heater Tap
Pin 7 - Cathode

HALF-WAVE RECTIFIER

Maximum Ratings, Design—Maximum Values:
PEAK INVERSE PLATE VOLTAGE ............ 365 max. volts
PEAK PLATE CURRENT .................. 530 max. ma
DC OUTPUT CURRENT ................... 82 max. ma
PEAK HEATER-CATHODE VOLTAGE:
  Heater negative with respect to cathode ... 350b max. volts
  Heater positive with respect to cathode ... 200c max. volts

Typical Operation:
In accompanying typical half-wave circuit with capacitor-input filter
AC Plate Supply Voltage (RMS) ........ 120 volts
Filter-Input Capacitor ................ 40 μf
Total Effective Plate Supply Resistance ... a
DC Output Current ..................... 75 ma
DC Output Voltage at Input
to Filter (Approx.) ................. 118 volts
Characteristics:
Tube-Voltage Drop for plate ma. = 150 . . . . 16 volts

a The heater of the 36AM3B is designed so that the heater section between pins 4 and 6 is used as a limiting resistance in the rectifier plate circuit (See accompanying Typical Half-Wave Circuit). This type is not designed for use with a panel lamp where the heater section between pins 4 and 6 is used as a panel-lamp shunt.
b The DC component must not exceed 350 volts.
c The DC component must not exceed 100 volts.