Half-Wave Gas and Mercury-Vapor Rectifier

GENERAL DATA

**Electrical:**

- Filament, Coated:
  - Voltage (AC) ........................................... 2.5 volts
  - Current at 2.5 volts ................................ 18 ± 2 amp
  - Minimum heating time prior to tube conduction ........................................ 60 sec
  - Typical Anode Starting Voltage .................................................. 20 volts
  - Peak Tube Voltage Drop at anode amperes = 20. ............ 9 volts

**Mechanical:**

- Operating Position ........................................ Vertical, base down
- Maximum Overall Length ........................................... 9-1/2"
- Maximum Diameter .................................................. 2-1/16"
- Weight (Approx.) .................................................. 6 oz
- Bulb ............................................................... T16
- Cap ............................................................... Medium (JEDEC No.C1-5)
- Socket ............................................................ Super-Jumbo 4-Contact
- Base ............................................................... Medium-Metal-Shell Super-Jumbo 4-Pin

Terminal Diagram:  

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Pin 1 – No Internal Connection  
Pin 2 – Filament  
Pin 3 – Filament  
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**Thermal:**

- Type of Cooling ........................................ Convection
- Temperature Rise of Condensed Mercury to Equilibrium Above Ambient Temperature (Approx.) .................. 30 °C

**HALF-WAVE RECTIFIER**

**Maximum and Minimum Ratings, Absolute-Maximum Values:**

*For power-supply frequency of 60 cps*

- PEAK INVERSE ANODE VOLTAGE ................................ 1000 max. volts
- ANODE CURRENT:
  - Peak ................................................. 77 max. amp
  - Average ............................................. 6.4 max. amp
  - Fault .................................................. 770 max. amp
- CONDENSED-MERCURY TEMPERATURE RANGE (Operating) ........ -40 to +100 °C
a With circuit returns to filament-transformer center-tap.
b Averaged over any interval of 20 seconds maximum.
c For longest life, the operating condensed-mercury temperature range after warm-up should be kept between +40° and +100° C which corresponds approximately to +10° to +70° C ambient.