

JOINT ELECTRON TUBE ENGINEERING COUNCIL

DATA SHEET

Electron Tube Type 5834

The 5834 is a single-ended, mercury-vapor, half-wave rectifier for use in low-voltage rectifier circuits.

Maximum Ratings, Absolute Values

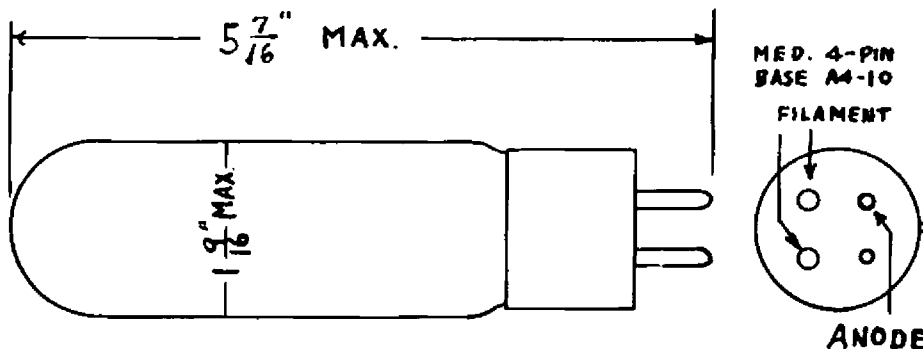
|  |                                |
|--|--------------------------------|
| Maximum Peak Inverse Anode Voltage         | <u>900</u> Volts               |
| Maximum Cathode Current                    |                                |
| Peak                                       |                                |
| In-phase Operation                         | <u>10</u> Amperes              |
| Quadrature Operation                       | <u>10</u> Amperes              |
| Average                                    |                                |
| In-phase Operation                         | <u>2</u> Amperes               |
| Quadrature Operation                       | <u>2</u> Amperes               |
| Surge (Maximum duration 0.1 seconds)       | <u>125</u> Amperes             |
| Maximum Averaging Time                     | <u>5</u> Seconds               |
| Maximum Frequency                          | <u>150</u> Cycles/sec          |
| Condensed Mercury Temperature Limits       |                                |
| (mercury or mercury-gas filled tubes only) | <u>+35° to +85°</u> Centigrade |

Electrical Data

|  | Min. | Bogey | Max. |         |
|--|------|-------|------|---------|
| Filament (heater) Voltage              | 2.38 | 2.5   | 2.62 | Volts   |
| Filament (heater) Current at 2.5 volts | XX   | 7     | 8    | Amperes |
| Cathode heating time, required         | 20   | XX    | XX   | Seconds |
| Anode Voltage Drop                     | XX   | 9     | XX   | Volts   |
| Critical Anode Voltage                 | XX   | XX    | 30   | Volts   |

Mechanical Data

|  |                            |
|--|----------------------------|
| Type of cooling                                | <u>Convection</u>          |
| Equilibrium Condensed-mercury Temperature Rise |                            |
| a. At Full Load, Approximate                   | <u>25°</u> C               |
| b. At No Load, Approximate                     | <u>20°</u> C               |
| Mounting position                              | <u>Vertical, base down</u> |
| Net Weight, maximum                            | <u>.3</u> Pounds           |



8/10/50

(N.E. type NL-649)

NOTE: Condensed mercury temperature is to be measured within 1/4" band immediately above base.