The RK4B31 is a heater-cathode, high vacuum power tube designed for use as a clipper diode or rectifier. It is mechanically rugged and in addition uses a hard glass nonex envelope. The plates are gold plated and zirconium molybdenum coated for better operation at high voltages. The cathode is helioc arc welded making the internal connection more rugged and giving better contact. Two ceramic spacers allows high temperatures during exhaust thereby obtaining less gas and longer life.

**MECHANICAL DATA**

- **ENVELOPE:** Per Outline
- **BASE:** 4 Pin Super Jumbo, Special Sleeve
- **TERMINAL CONNECTIONS:**
  - Pin 1: Heater and Cathode
  - Pin 2: Heater and Cathode
  - Pin 3: Heater
  - Pin 4: Heater
- **COOLING:** Freely Circulating Air

**ELECTRICAL DATA**

**RATINGS AND ABSOLUTE MAXIMUM VALUES - CLIPPER DIODE:**

- Heater Voltage (ac) 5.0 ± 10% volts
- Peak Inverse Voltage 16 kv
- Peak Plate Current 12 amp
- Average Plate Current 60 ma
- Heating Time 2 minutes

**RATINGS AND ABSOLUTE MAXIMUM VALUES - RECTIFIER:**

- Heater Voltage (ac) 5.0 ± 10% volts
- Peak Inverse Voltage 16 kv
-Peak Plate Current 470 amp
- Average Plate Current 150 ma
- Heating Time 2 minutes

**CHARACTERISTICS AND TYPICAL OPERATION:**

- Heater Potential (ac) 5.0 volts
- Heater Current (ac) 5.0 amp
- Heating Time 2 minutes
- Plate Current (dc) (E₀ = 130 Vdc) 300 ma min
- Peak Emission (E₀ = 2500 v) 18 amp min

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**PLATE VOLTAGE VS PLATE CURRENT**

- **E₀ = 5.0 Volts**

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