



Excellence in Electronics

**TYPE
RK-4B31**

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 heliarc 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 Cap Plate

COOLING: Freely Circulating Air

ELECTRICAL DATA

RATINGS AND ABSOLUTE MAXIMUM VALUES - CLIPPER DIODE:

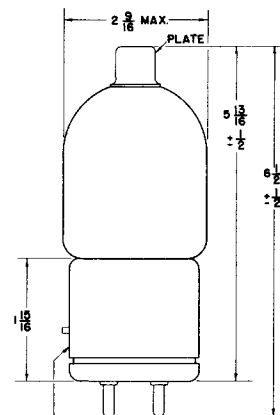
Heater Voltage (ac)	5.0 ± 10 %	volts
Peak Inverse Voltage	16	kv
Peak Plate Current	12	amp
Average Plate Current	60	ma
Heating Time	2	minutes

RATINGS AND ABSOLUTE MAXIMUM VALUES - RECTIFIER:

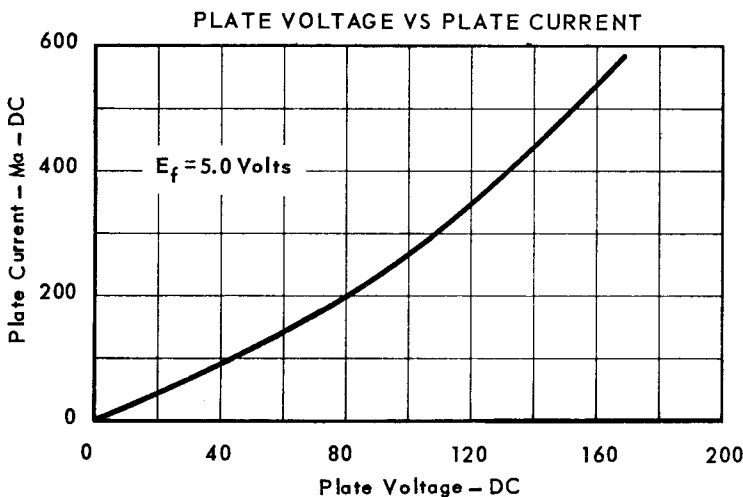
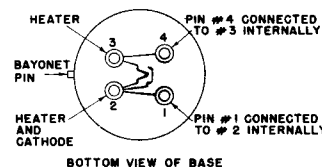
Heater Voltage (ac)	5.0 ± 10 %	volts
Peak Inverse Voltage	16	kv
Peak Plate Current	.470	amp
Average Plate Current	150	ma
Heating Time	2	minutes

CHARACTERISTICS AND TYPICAL OPERATION:

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



4 PIN SUPER-JUMBO BASE (EXCEPT METAL SLEEVE 1 1/8" LENGTH)



Tentative Data

**INDUSTRIAL TUBE DIVISION
RAYTHEON COMPANY**