

*Excellence in Electronics*

The RK3B29 is a heater-cathode, high vacuum type designed for use as a clipper diode or rectifier. It is mechanically rugged and in addition use a hard glass nonex envelope. The plates are gold plated, zirconium coated and radially cooled for better operation at high voltages. The cathode is heliarc welded making the internal connection more rugged and giving better contact. The self supporting anodes eliminate use of mica spacers allowing high temperatures during exhaust thereby obtaining less gas and longer life.

MECHANICAL DATA

ENVELOPE: T-12

BASE: Medium 4-Pin Bayonet, A 4-10, Phenolic

TERMINAL CONNECTIONS:

Pin 1 Heater

Pin 2 NC

Pin 3 NC

Pin 4 Heater and Cathode

Cap. Plate

COOLING: Freely Circulating Air**ELECTRICAL DATA**RATINGS—ABSOLUTE MAXIMUM—RECTIFIER:OPERATION 1

Heater Voltage (ac)

Peak Plate Inverse Voltage

Peak Plate Current

Average Plate Current (dc)

2.5 ± 10 % volts

16 kv

.25 amp

64 ma

OPERATION 2

Heater Voltage (ac)

Peak Plate Inverse Voltage

Peak Plate Current

Average Plate Current (dc)

2.5 ± 10 % volts

7.7 kv

.30 amp

80 ma

OPERATION 3

Heater Voltage (ac)

Peak Plate Inverse Voltage

Peak Plate Current

Average Plate Current (dc)

2.5 ± 10 % volts

5.0 kv

.30 amp

95 ma

RATINGS—ABSOLUTE MAXIMUM—SHUNT DIODE:

Heater Voltage (ac)

Peak Plate Inverse Voltage

Peak Plate Current

Average Plate Current (dc)

Pulse Duration in 100 μsec Interval

2.5 ± 10 % volts

10 kv

8.0 amp

18 ma

25 μsec

CHARACTERISTICS AND TYPICAL OPERATION:

Heater Potential

Heater Current

Heating Time

Plate to Cathode Capacitance

Plate Current (dc)

Peak Emission (eb = 4000 v)

2.5 volts

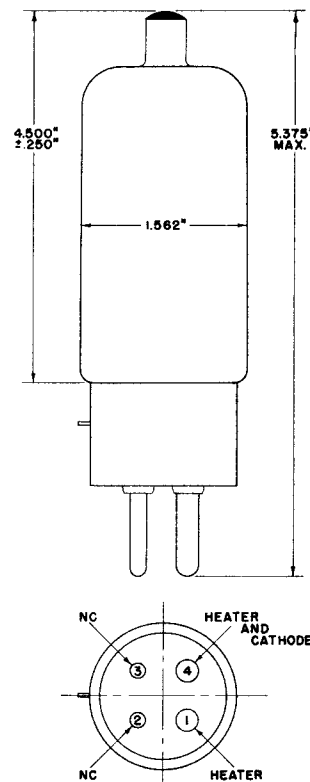
4.9 amp

2 minutes

2.5 μuf

90 ma min

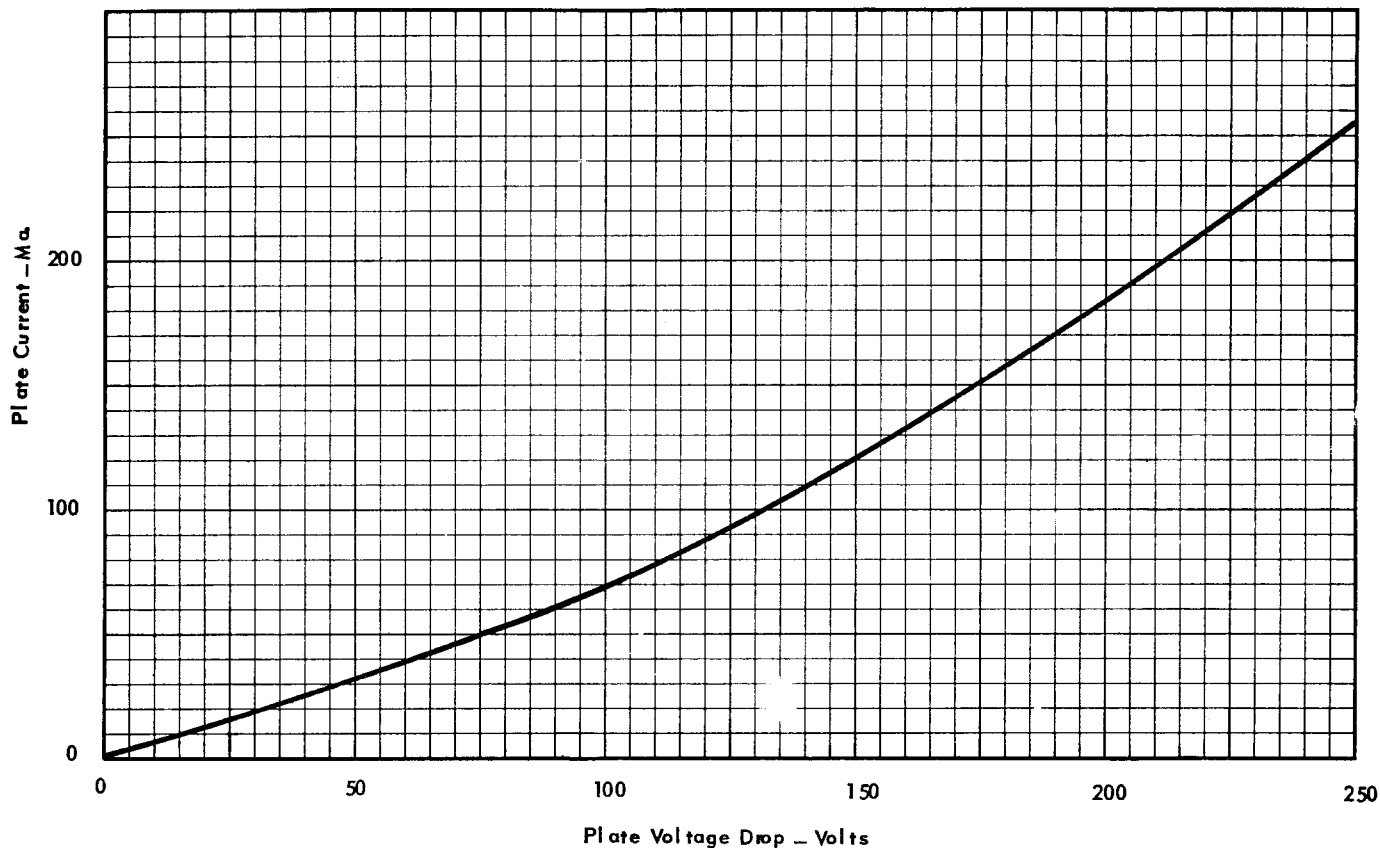
8.0 amp

**TYPE
RK-3B29**

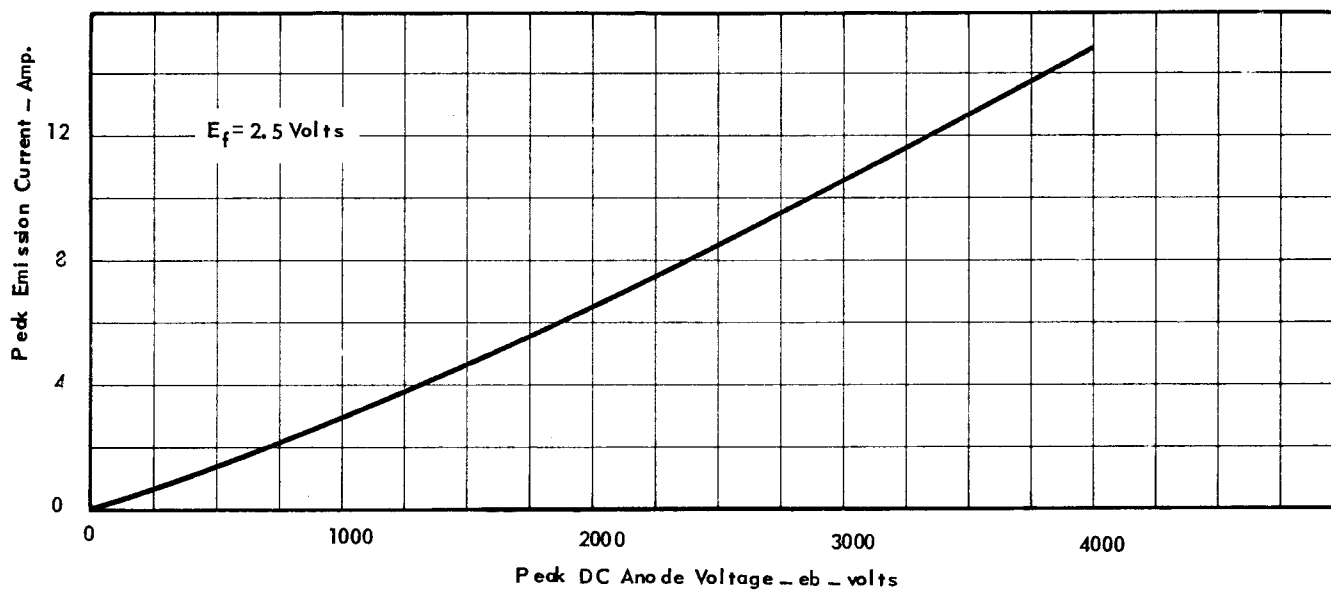


DIODE RECTIFIER

AVERAGE PLATE VOLTAGE DROP



PEAK DC ANODE VOLTAGE VS PEAK EMISSION CURRENT



INDUSTRIAL TUBE DIVISION

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