



TYPE

RK-3B29

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 DATAENVELOPE: T-12BASE: Medium 4-Pin Bayonet, A 4-10, PhenolicTERMINAL 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)

$2.5 \pm 10\%$ volts
16 kv
.25 amp
64 ma

OPERATION 2

Heater Voltage (ac)
Peak Plate Inverse Voltage
Peak Plate Current
Average Plate Current (dc)

$2.5 \pm 10\%$ volts
7.7 kv
.30 amp
80 ma

OPERATION 3

Heater Voltage (ac)
Peak Plate Inverse Voltage
Peak Plate Current
Average Plate Current (dc)

$2.5 \pm 10\%$ volts
5.0 kv
.30 amp
95 ma

RATINGS - ABSOLUTE MAXIMUM - SHUNT DIODE:

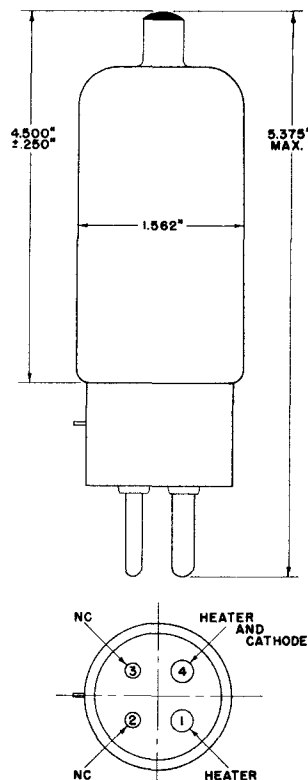
Heater Voltage (ac)
Peak Plate Inverse Voltage
Peak Plate Current
Average Plate Current (dc)
Pulse Duration in 100 μ sec Interval

$2.5 \pm 10\%$ volts
10 kv
8.0 amp
18 ma
25 μ sec

CHARACTERISTICS AND TYPICAL OPERATION:

Heater Potential
Heater Current
Heating Time
Plate to Cathode Capacitance
Plate Current (dc)
Peak Emission (eb=4000 v)

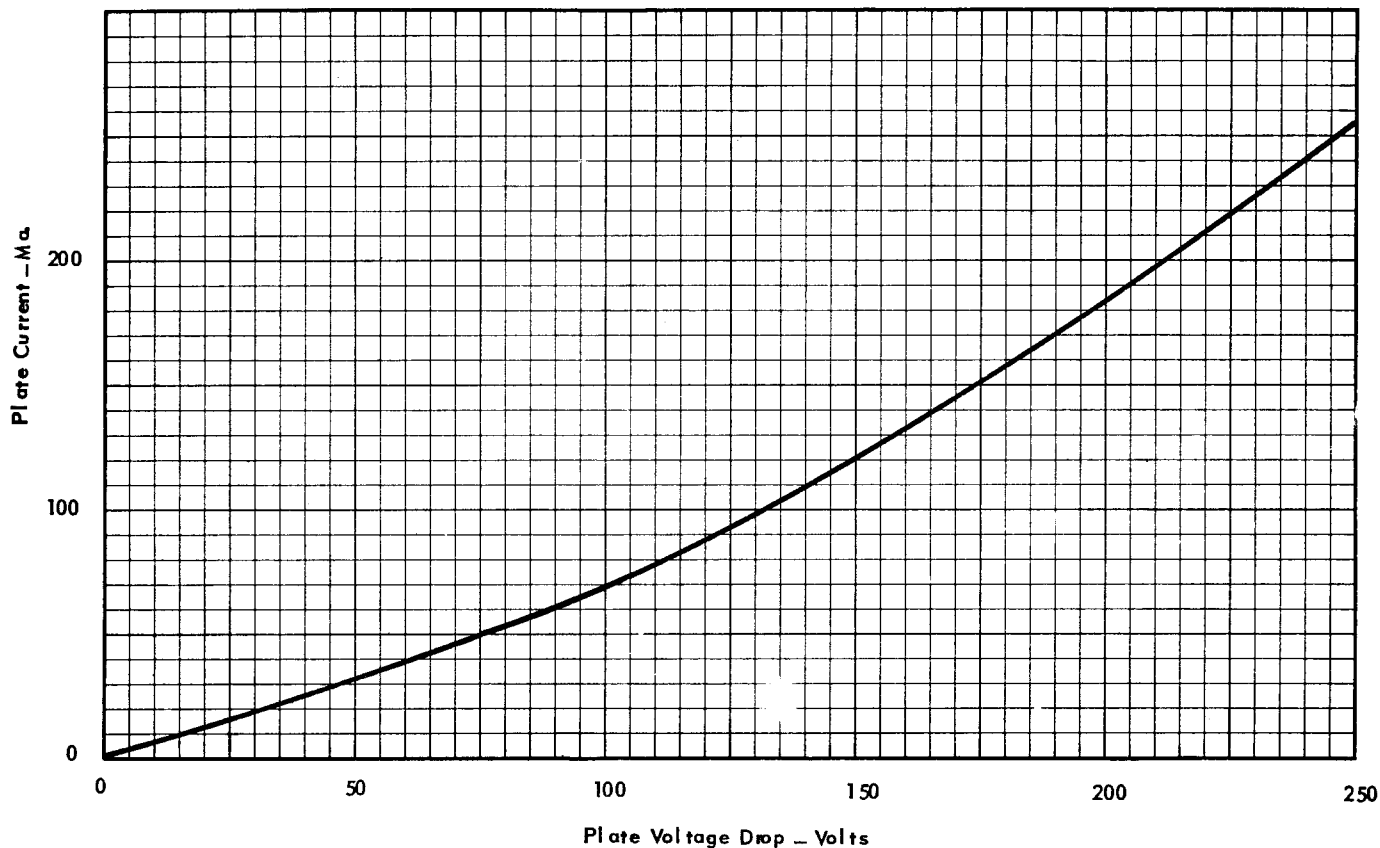
2.5 volts
4.9 amp
2 minutes
2.5 μ uf
90 mamin
8.0 amp



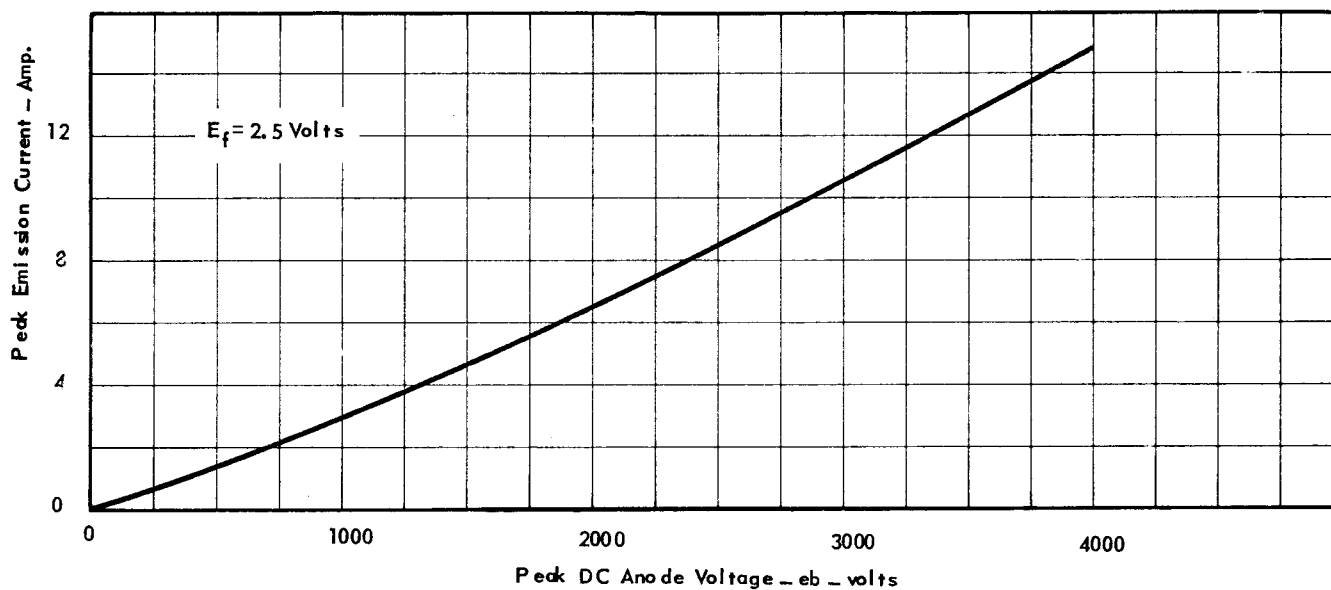


DIODE RECTIFIER

AVERAGE PLATE VOLTAGE DROP



PEAK DC ANODE VOLTAGE VS PEAK EMISSION CURRENT



INDUSTRIAL TUBE DIVISION

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