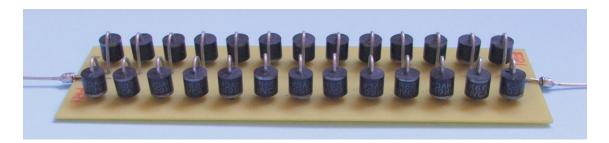


High Voltage Rectifier from Scanning Devices, Inc.



Part Number Description

FR1 High Voltage Rectifier, 5 Amp, 26KV

Physical Description:

PCB: 7"L * 2"W (board thickness .063")

Component Layout: 26 Fast Recovery Diodes arranged in 2 rows of 13

6 1/4" Lead Length: Overall Length: 19 ½"

Electrical Specifications: (Maximum Static DC Ratings)

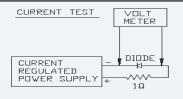
Applied Forward Current – 5 Amps

Result:

Diode voltage 20.16 volts

Diode temperature: 230 degrees F

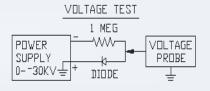
Muffin fan air cooling



Applied Reverse Voltage - 26,000 volts

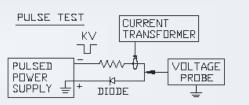
Result:

- Diode voltage: -26,000 Volts
- Diode leakage current: 70 micro Amps
- Diode Temperature: ambient, 70 degrees F

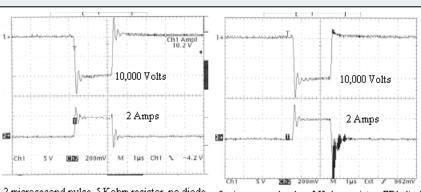


Pulsed Performance

2 micro second, -10,000 volt pulse applied



Graphics show pulse voltage excitation (upper), and current (lower). Left graphic is without diode, 5 Kohm resistor only. Right graphic includes diode.



2 microsecond pulse, 5 Kohm resistor, no diode

2 microsecond pulse, 5 Kohm resistor, FR1 diode