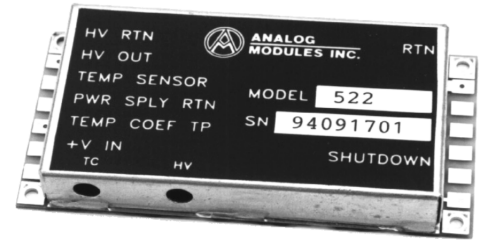


### TEMPERATURE-COMPENSATED HIGH VOLTAGE POWER SUPPLY FOR PHOTODETECTOR BIASING

- ADJUSTABLE TEMPERATURE COEFFICIENT
- VERY LOW NOISE
- OUTPUT VOLTAGE UP TO -250 V
- SMALL SIZE – PCB OR PLATE MOUNT
- LOW POWER
- 5 VOLT OPERATION
- HIGH RELIABILITY



#### DESCRIPTION:

The **Model 522-1** is a low-noise, high voltage power supply with adjustable temperature coefficients suitable for biasing PIN or Avalanche Photodiodes (APDs). Ultra-low power consumption and operation from 5 volts make the **Model 522-1** ideal for use in power-critical applications. A shutdown pin reduces the power consumption to 3mA. Output noise is exceptionally low. Continuous current limiting and short-circuit protection help protect the detector from excessive light-induced dissipation. The low profile, two cubic inch package can be chassis mounted or PCB mounted.

#### SPECIFICATIONS:

##### Input

Voltage +5 VDC  $\pm$  10%  
Current 15 mA typical (no load)

##### Output

Voltage -20 to -250 V  
Current 2 mA, continuous short circuit protection  
Power 150 mW  
Ripple 1 mV<sub>RMS</sub>

##### Regulation

Load <0.005%, 0 to 100% load  
Line  $\pm$ 1.0%, +4.5 V to +5.5 V input  
Voltage Control Internal trimpot

##### Coefficient

Internal trimpot  
0 to +2.5 V/°C

##### Shutdown

TTL high, 68 k $\Omega$  input impedance

##### Temperature

0° to 70°C

##### Connections

Solder pads

##### Size

3.15" x 1.58" x 0.45"

##### Weight

1.5 oz (43 grams)



Specifications subject to change without notice.

All specifications valid at 25°C.

#### APPLICATIONS:

*Temperature-Compensated HV Power Supply for PIN or Avalanche Photodiodes*

