PROGRAMMABLE HIGH VOLTAGE POWER SUPPLY FOR PHOTODETECTOR BIASSING

- 300V AND 500V VERSIONS
- VERY LOW NOISE
- HERMETICALLY SEALED
- SMALL SIZE
- SHIELDED METAL CASE
- HIGH RELIABILITY

DESCRIPTION:

The Model 524 series provides a fixed or variable high-voltage source for photodetector biasing or similar applications. The power converter uses techniques to minimize sharp switching transients which can interfere with sensitive circuits. Output voltage may be programmed by an external 0 to 4.5 volt source. To ensure low EMI levels, the output is filtered and the module is hermetically sealed in a non-isolated metal case. See interface description for detailed mechanical drawing and pinout configuration.

SPECIFICATIONS:

All specifications valid at 25°C

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>524-1</th>
<th>524-2</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Min.</td>
<td>Typical</td>
</tr>
<tr>
<td>INPUT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power*</td>
<td>+4.75</td>
<td>+5.00</td>
</tr>
<tr>
<td>Current at max output (10µA load)</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>Voltage Control (0V = max output)</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>OUTPUT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage</td>
<td>+100</td>
<td>-</td>
</tr>
<tr>
<td>Current</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ripple at max output (10µA load)</td>
<td>-</td>
<td>4</td>
</tr>
</tbody>
</table>

TEMPERATURE

- Operating: -40°C to +85°C
- Storage: -55°C to +125°C

SIZE

1.1” x 0.52” x 0.45” (0.247 cu. In.)

WEIGHT

0.26 Oz. (7.5 grams)

CONNECTIONS

Pins

*Operation up to 15VDC input possible with reduced output current and increased ripple. Specifications subject to change without notice.

APPLICATIONS:

HV Bias Source for PIN and APD Detectors, Power Supply for Pulsed Emitters
**DC Power Input**
The 524 operates from +5VDC but can accept up to +15VDC input power. Input voltages >+5VDC will result in reduced output current and increased ripple.

**Voltage Control**
The output voltage is linearly proportional to the 0 to +4.5V control input. +4.5V control input results in minimum output and 0V control input results in maximum output.