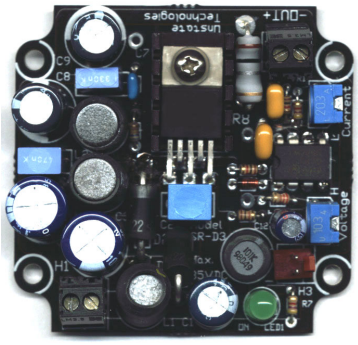
Switch-mode Step-down Regulator



The SRD power converter is a high frequency, switch-mode, step-down regulator for applications requiring stable power. The compact and efficient design requires little heatsinking or support components. It provides the functions of bench-top power supplies in a smaller and more efficient setup.

Benefits

- Economical and easy-to-use.
- Compact and efficient.
- Reliable operation.
- Provides stable power to load.

Applications

- Bench-top power supply.
- Powering electronic products.
- Battery charging.
- Replace lost or broken power supplies.
- Marine, industrial, auto, recreational Camping, remote field-use, others.

Features

- Adjustable voltage (CV) and current (CC) limiting.
- Power protection and filtering.
- Wide input voltage range.
- Stable voltage and current limiting.
- Efficient high frequency switch-mode design.

Available Models

OT-PESRD-0V2-01: 35V input max., adjustable 6-17VDC output, 2A max. CV or CC/CV models available. Other output voltages available.

Voltage and current limiting

The benefits of providing clean, regulated power to equipment result in a more reliable and cost-effective system over the lifespan of the product. Many users do not take into account clean power until the equipment provides problems or fails. Also, many systems do not operate at optimum performance if power is inconsistent. Some electronic components such as LEDs require constant current operation. The LEDs operating voltage drastically decreases with increasing temperature and decreasing forward current. If the LEDs were operated in a fixed, constant voltage method with minimum power limiting, the operating current may increase more than 50% from cold. There is the chance of thermal runaway and the LEDs becoming damaged. A power regulator with voltage and current limiting will maintains the LEDs in an optimum power band for maximum life and performance.

Technical Specifications:

Input voltage:	9-35VDC
Output voltage:	6-17VDC, up to 25VDC
Output current:	0-2.0A
Current limit control:	0.51A-2.1A
Noise:	<100mV ripples, <150mV$_{p-p}$ voltage spikes at full load.
Operation temperature:	-20^{O}C to 60^{O}C
Dimension:	2.3”x2.1”. 4x 1/8” mounting holes at 2”x1.375” spacing.

Note: Do not use in wet or damp locations. Do not exceed the specifications of the unit. The unit should be mounted away from sunlight for easier viewing of the display.