



**Sensors**



**Switches**



**Controls**

## Application notes



**Application Note: October 2022**

**Industry: Semiconductor**

**Product: SPDE series**

**Customer: OEM**

**Subject: Ultra-compact power supply design for semiconductors in oven equipment**

### CUSTOMER ISSUE :

Semiconductors are used in devices like radios, televisions, and computers, making this industry very profitable, and in high demand.

For this reason, it is mandatory for semiconductors to maintain high-quality levels in the years to come.

It is necessary to provide compact and reliable solutions in standard and custom models to offer excellence in services.

Main requirements for power supplies are:

- Compactness
- Relay output
- PFC
- High efficiency
- High degree of reliability during operation

### OUR SOLUTION :

The SPDE power supply series is extremely compact thereby facilitating its installation even in tight spaces.

The 480 W model has a width of just 48 mm.

The SPDE..R model of this series comes with a DC OK relay indication and has a built-in PFC, which assures high operating efficiency up to 94%.

The high degree of reliability during operation is ensured by the built-in protection functions such as output short circuit, over-current, over-voltage and over-temperature.

### BENEFITS :

- Occupies less space in the panel
- DC OK relay indication and built-in active PFC (only in SPDE..R models)
- Efficiency up to 94%
- Short Circuit, Over Current, Over Voltage, Over Temperature output protections
- Wide selection of power outputs: (75 / 120 / 240 / 480 W)
- Wide selection of voltage outputs: (12 / 24 / 48 VDC)
- Operates on different supply voltages (90 VAC to 264 VAC or 120 VDC to 370 VDC)
- UL61010 and UL62368 certified