

# SC15B Series



## DC/DC

## 15 Watts

Single/Dual Outputs

- Industry standard form factor 2 x 1 x 0.40
- Wide input voltage range  
9-36 Vdc  
18-75 Vdc
- Remote shutdown
- 400kHz switching frequency
- Continuous short circuit protection
- Six-sided shielding
- UL1950, cUL, EN60950

## Specifications

### INPUT

Voltage Range	9-36 Vdc 18-75 Vdc
Reverse Polarity Protected	To Nominal Input Current External Fuse Required
Remote On/Off Control	Optional

### OUTPUT

Voltage Tolerance	± 1%
Ripple and Noise	50mV pk-pk (typ)
Short Circuit Protection	Continuous Power Cycle
Temperature Coefficient	0.02% / °C

### GENERAL

Regulation:	
Line	0.25%
Load	0.5% (singles) 1.0% (duals)
Switching Frequency	400 kHz (±10%)
Efficiency	80-85% (typ)
I/O Isolation	1500 Vdc

### ENVIRONMENTAL

Operating Temperature	-40°C to +60°C
Max Baseplate Temp	105°C
Storage Temperature	-55°C to +105°C
Cooling	Free-air Convection

All specifications are typical at nominal line and full load at 25°C unless otherwise noted and are subject to change without notice.

The SC15B series of cost sensitive single and dual output 15 watt DC/DC converters are specifically designed for critical applications requiring a compact, low profile case.

These high performance 15 watt converters offer a high switching frequency topology, 1500 Vdc I/O isolation, and efficiencies to 85%.

Fourteen models available. Two input voltage ranges of 9-36 Vdc and 18-75 Vdc provide regulated outputs of 3.3, 5, 12, 15 and ±5, ±12 and ±15 Vdc.

## Applications

These units are ideally suited for telecommunications, distributed power systems, automatic test equipment, medical and process control.



**SEMICONDUCTOR  
CIRCUITS, INC.**

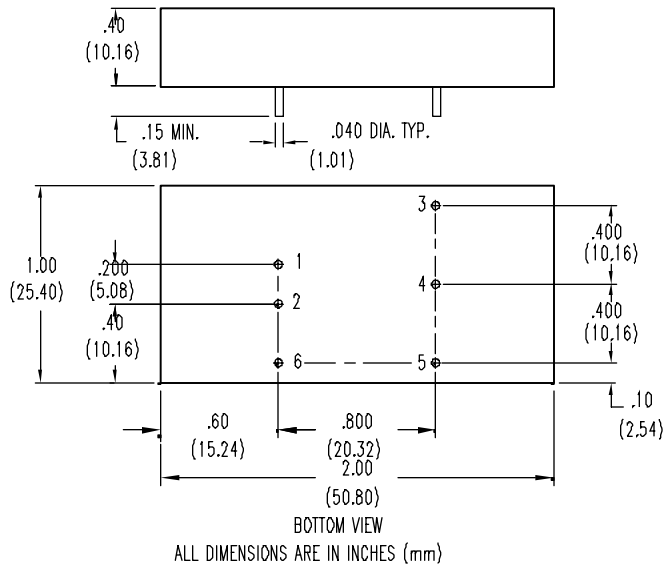
toll-free 888.438.3232 toll-free 888.GET.DCDC

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# SC15B Series Ordering Information

Input Voltage Range	Output Voltage	Output Current	Model Number
9-36 Vdc	3.3 Vdc	3000mA	SC15B17-300-18
9-36 Vdc	5 Vdc	3000mA	SC15B11-300-18
9-36 Vdc	12 Vdc	1250mA	SC15B12-125-18
9-36 Vdc	15 Vdc	1000mA	SC15B13-100-18
9-36 Vdc	±5 Vdc	±1500mA	SC15B21-300-18
9-36 Vdc	±12 Vdc	±625mA	SC15B22-125-18
9-36 Vdc	±15 Vdc	±500mA	SC15B23-100-18
18-75 Vdc	2.5 Vdc	3000mA	SC15B16-300-46
18-75 Vdc	3.3 Vdc	3000mA	SC15B17-300-46
18-75 Vdc	5 Vdc	3000mA	SC15B11-300-46
18-75 Vdc	12 Vdc	1250mA	SC15B12-125-46
18-75 Vdc	15 Vdc	1000mA	SC15B13-100-46
18-75 Vdc	±5 Vdc	±1500mA	SC15B21-300-46
18-75 Vdc	±12 Vdc	±625mA	SC15B22-125-46
18-75 Vdc	±15Vdc	±500mA	SC15B23-100-46

## Dimensions and Connections



### PIN CONNECTIONS

#### Single Output

- +Input
- Input
- +Output
- No Pin
- Common
- Remote On/Off

### PIN CONNECTIONS

#### Dual Outputs

- +Input
- Input
- +Output
- Common
- Output
- Remote On/Off

### NOTES:

- Ripple measured with a 3.3  $\mu$ F tantalum capacitor across each output.
- Minimum load 10% of full load. Load regulation from full load to minimum load.
- The SC15B series requires an external filter capacitor across the input valued at 2.2 $\mu$ F @ 100Vdc such as ITW/Paktron part# 225K100RA4 or equiv.
- Case connected to pin #1 on -46 models. Case connected to pin #2 on -12 and -24 models

For Optional Remote On/Off add suffix "E"  
(i.e. SC15B11-300-46E)

Remote ON/Off Control (pin 6) common referenced to - Input (pin 2).

On greater than 2.5 Vdc or open circuit  
Off less than 0.8 Vdc

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