

SC15A Series



DC/DC

15 Watts

Single/Dual Outputs

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

The SC15A 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%.

Twenty-one models available. Three input voltage ranges of 9-18 Vdc, 18-36 Vdc and 36-75 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.

Specifications

INPUT

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

OUTPUT

Voltage Tolerance	$\pm 1\%$
Ripple and Noise	50mV pk-pk (typ)
Short Circuit Protection	Continuous Power Cycle
Temperature Coefficient	.02% / °C

GENERAL

Regulation:	
Line	0.25%
Load	0.5% (singles) 1.0% (duals)
Switching Frequency	400 kHz ($\pm 10\%$)
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.

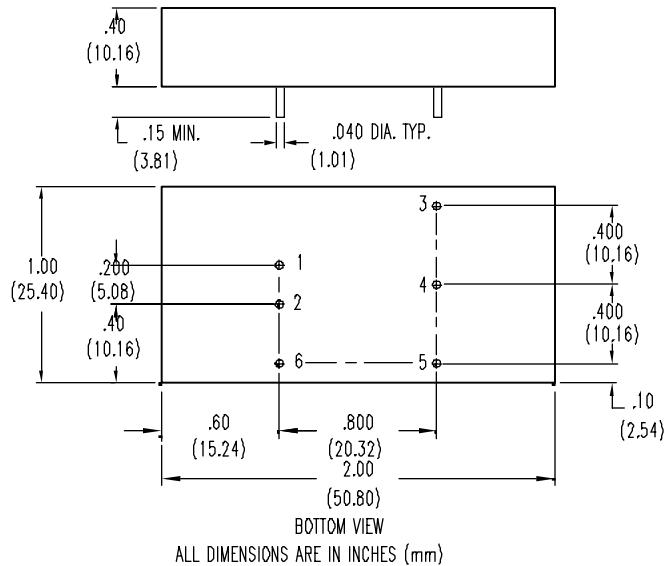


**SEMICONDUCTOR
CIRCUITS, INC.**

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SC15A Series Ordering Information

Input Voltage Range	Output Voltage	Output Current	Model Number
9-18 Vdc	3.3 Vdc	3000mA	SC15A17-300-12
9-18 Vdc	5 Vdc	3000mA	SC15A11-300-12
9-18 Vdc	12 Vdc	1250mA	SC15A12-125-12
9-18 Vdc	15 Vdc	1000mA	SC15A13-100-12
9-18 Vdc	±5 Vdc	±1500mA	SC15A21-300-12
9-18 Vdc	±12 Vdc	±625mA	SC15A22-125-12
9-18 Vdc	±15 Vdc	±500mA	SC15A23-100-12
18-36 Vdc	3.3 Vdc	3000mA	SC15A17-300-24
18-36 Vdc	5 Vdc	3000mA	SC15A11-300-24
18-36 Vdc	12 Vdc	1250mA	SC15A12-125-24
18-36 Vdc	15 Vdc	1000mA	SC15A13-100-24
18-36 Vdc	±5 Vdc	±1500mA	SC15A21-300-24
18-36 Vdc	±12 Vdc	±625mA	SC15A22-125-24
18-36 Vdc	±15Vdc	±500mA	SC15A23-100-24
36-75Vdc	3.3 Vdc	3000mA	SC15A17-300-48
36-75Vdc	5 Vdc	3000mA	SC15A11-300-48
36-75Vdc	12 Vdc	1250mA	SC15A12-125-48
36-75Vdc	15 Vdc	1000mA	SC15A13-100-48
36-75Vdc	±5 Vdc	±1500mA	SC15A21-300-48
36-75Vdc	±12 Vdc	±625mA	SC15A22-125-48
36-75Vdc	±15Vdc	±500mA	SC15A23-100-48



Dimensions and Connections

NOTES:

1. Ripple measured with a 3.3 μ F tantalum capacitor across each output.
2. Minimum load 10% of full load. Load regulation from full load to minimum load.
3. The SC15A series requires an external filter capacitor across the input valued at 2.2 μ F @ 100Vdc such as ITW/Paktron part# 225K100RA4 or equiv.
4. Case connected to pin #1 on -48 models. Case connected to pin #2 on -12 and -24 models

PIN CONNECTIONS

Single Output

1. +Input
2. -Input
3. +Output
4. No Pin
5. Common
6. Remote On/Off

PIN CONNECTIONS

Dual Outputs

1. +Input
2. -Input
3. +Output
4. Common
5. -Output
6. Remote On/Off

For Optional Remote On/Off add suffix "E"
(i.e. SC15A11-300-48E)

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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