SC10B Series

DC/DC

10 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 SC10B series of cost sensitive single and dual output 10 watt DC/DC converters are specifically designed for critical applications requiring a compact, low profile case.

These high performance 10 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.

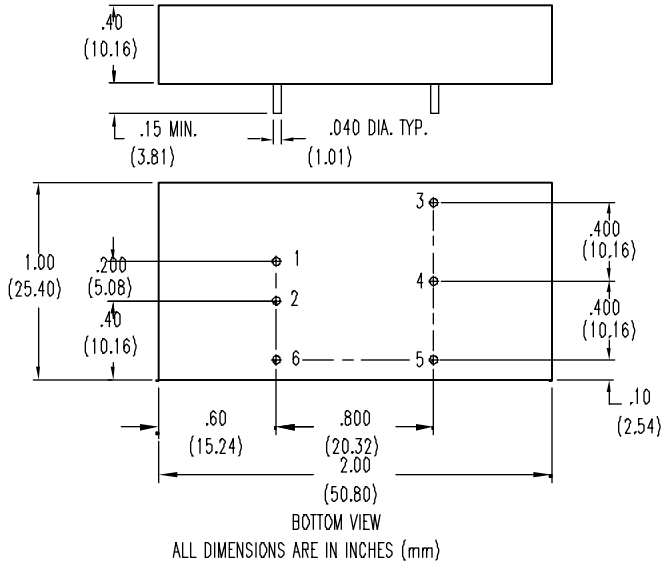
Applications

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

SC10B Series Ordering Information

Input Voltage Range	Output Voltage	Output Current	Model Number
9-36 Vdc	3.3 Vdc	2400mA	SC10B17-240-18
9-36 Vdc	5 Vdc	2000mA	SC10B11-200-18
9-36 Vdc	12 Vdc	830mA	SC10B12-083-18
9-36 Vdc	15 Vdc	600mA	SC10B13-060-18
9-36 Vdc	±5 Vdc	±750mA	SC10B21-150-18
9-36 Vdc	±12 Vdc	±375mA	SC10B22-083-18
9-36 Vdc	±15 Vdc	±300mA	SC10B23-060-18
18-75 Vdc	3.3 Vdc	2400mA	SC10B17-240-46
18-75 Vdc	5 Vdc	2000mA	SC10B11-200-46
18-75 Vdc	12 Vdc	830mA	SC10B12-083-46
18-75 Vdc	15 Vdc	600mA	SC10B13-060-46
18-75 Vdc	±5 Vdc	±750mA	SC10B21-150-46
18-75 Vdc	±12 Vdc	±375mA	SC10B22-083-46
18-75 Vdc	±15Vdc	±300mA	SC10B23-060-46

Dimensions and Connections



NOTES:
1. Ripple measured with a 3.3 µF tantalum capacitor across each output.
2. Minimum load 10% of full load. Load regulation from full load to minimum load.
3. The SC10B series requires an external filter capacitor across the input valued at 2.2µF @ 100Vdc such as ITW/Paktron part# 225K100RA4 or equiv.
4. Case connected to pin #1 on -46 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. SC10B11-200-46E)

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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