

SC05N Series



DC/DC

5 Watts

Single Outputs

- Input ranges
 - 3-3.6 Vdc
 - 4.5-5.5 Vdc
 - 10-14 Vdc
- Remote shutdown
- 200kHz switching frequency

Specifications

INPUT

Voltage Range	3.0-3.6 Vdc 4.5-5.5 Vdc 10.0-14.0 Vdc
Reverse Polarity Protected	To Nominal Input Current External Fuse Required
Remote On/Off Control	All Models

OUTPUT

Voltage Tolerance	± 1.5%
Voltage Adjust	2.1V ±200mV 3.3V ±300mV 5.0V ±500mV 12.0V ±1.2V
Ripple and Noise	60mV pk-pk 45mV pk-pk (2.1 Vdc)
Short Circuit Protection	Momentary(0.1 second max)

GENERAL

Line Regulation	1.0%
Load Regulation	3.0%
Efficiency	2.1 V 80-84% (typ) 3.3 V 82-88% (typ) 5.0 V 83-88% (typ) 12.0V 86-88% (typ)
Isolation	Non-galvanically Isolated

ENVIRONMENTAL

Operating Temperature	-40°C to +85°C No Derating
Reflow Soldering	215°C peak 6 sec. max
Storage Temperature	-40°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 5 Watt SC05N Series of high performance converters offer a high switching frequency topology and efficiencies to 88% typical over varying load conditions of 10% to 100%. Additional features include input reverse polarity protection, remote on/off control, logic compatible with CMOS or open collector TTL and an operating temperature range of -40°C to +85°C with no derating. Units are packaged in a surface mountable package and measure 0.93" x 0.93" x 0.35".

Applications

These units are ideally suited for data processing and networking applications requiring point of load regulation such as automotive test equipment, process control and minicomputers.



**SEMICONDUCTOR
CIRCUITS, INC.**

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

SC05N Series Ordering Information

Input Voltage Range	Output Voltage	Output Current	Model Number
3.00-3.6 Vdc	2.1 Vdc	2500 mA	SC05N16-250-03
3.00-3.6 Vdc	5.0 Vdc	1000 mA	SC05N17-100-03
4.5-5.5 Vdc	2.1 Vdc	2500 mA	SC05N16-250-05
4.5-5.5 Vdc	3.3 Vdc	2500 mA	SC05N17-250-05
4.5-5.5 Vdc	12 Vdc	416 mA	SC05N12-042-05
10-14 Vdc	3.3 Vdc	2000 mA	SC05N17-200-12

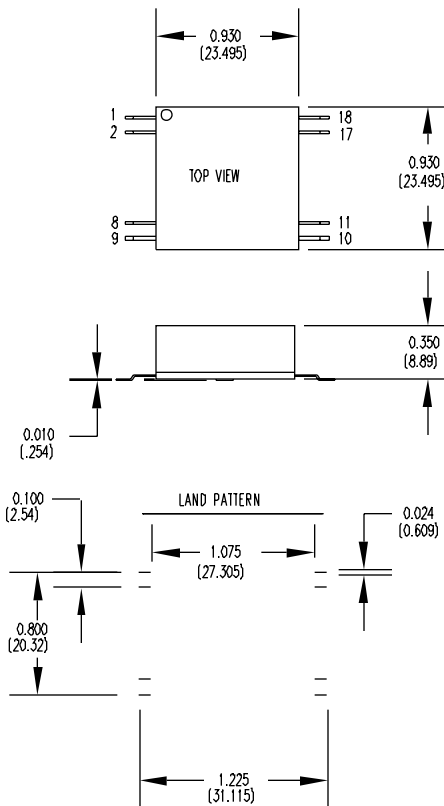
Dimensions and Connections

PIN CONNECTIONS

1. Vint
2. Enable
8. Common
9. Common
10. Common
11. Common
17. VOut Adjust
18. Vout

NOTES:

1. Ripple measured with a 100 μ F, 10 Volt capacitor across output.
2. Case - High Temp Epoxy
3. Not internally short circuit protected.



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