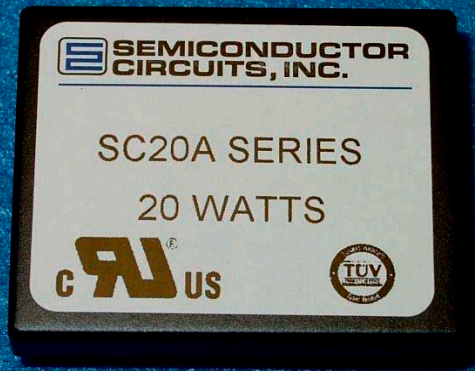


SC20A Series



DC/DC

20 Watts

Single/Dual Outputs

- 4:1 ultra wide input range
9-36 Vdc
18-75 Vdc
36-75 Vdc
- Remote shutdown
- 200kHz switching frequency
- Continuous short circuit protection
- Six-sided shielding
- UL1950, cUL, EN60950

Specifications

INPUT

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

OUTPUT

Voltage Tolerance	± 1%
Ripple and Noise	50mV pk-pk (typ)
Trim Adjustable	±10%
Short Circuit Protection	Continuous Power Cycle
Temperature Coefficient	0.02% / °C

GENERAL

Regulation:	
Line	0.25%
Load	0.5% (singles) 1.0% (duals)
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 SC20A series is an economically priced 20 watt DC/DC converter featuring ultra-wide input range, efficiencies to 85% and a continuous six-sided shielded case. Telecom models (-48) feature thermal shutdown and undervoltage lockout compatible with ETS 300 132-2 paragraph 4.6. Other key features include: overvoltage protection, output trim adjustability, TTL and CMOS compatible remote on/off, short circuit protection and small size. The SC20A series measures only 1.6" x 2.0" x 0.40" and offers a power density of 15.7 watts/cu. in.

Applications

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

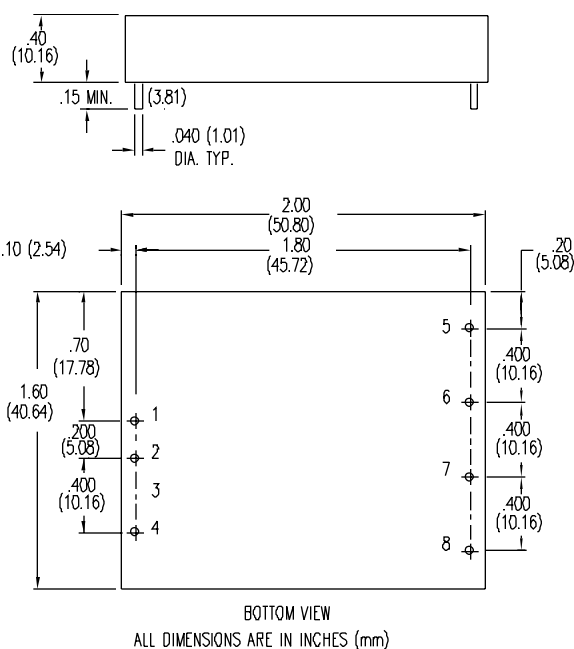


**SEMICONDUCTOR
CIRCUITS, INC.**

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

SC20A Series Ordering Information

Input Voltage Range	Output Voltage	Output Current	Model Number
9-36 Vdc	3.3 Vdc	4500mA	SC20A17-450-18
9-36 Vdc	5 Vdc	4000 mA	SC20A11-400-18
9-36 Vdc	12 Vdc	1670mA	SC20A12-167-18
9-36 Vdc	15 Vdc	1340mA	SC20A13-134-18
9-36 Vdc	±12 Vdc	±840mA	SC20A22-167-18
9-36 Vdc	±15 Vdc	±667mA	SC20A23-134-18
18-75 Vdc	3.3 Vdc	4500mA	SC20A17-450-46
18-75 Vdc	5 Vdc	4000mA	SC20A11-400-46
18-75 Vdc	12 Vdc	1670mA	SC20A12-167-46
18-75 Vdc	15 Vdc	1340mA	SC20A13-134-46
18-75 Vdc	±12 Vdc	±840mA	SC20A22-167-46
18-75 Vdc	±15 Vdc	±667mA	SC20A23-134-46
36-75 Vdc	3.3 Vdc	4500mA	SC20A17-450-48
36-75 Vdc	5 Vdc	4000mA	SC20A11-400-48
36-75 Vdc	12 Vdc	1670mA	SC20A12-167-48
36-75 Vdc	15 Vdc	1340mA	SC20A13-134-48
36-75 Vdc	±12 Vdc	±840mA	SC20A22-167-48
36-75 Vdc	±15Vdc	±667mA	SC20A23-134-48



Dimensions and Connections

NOTES:

- Ripple measured with a 3.3 μ F tantalum capacitor across each output.
- Minimum load 10% of full load. Load regulation from full load to minimum load.
- The SC20A series requires an external filter capacitor across the input valued at 2.2 μ F @ 100Vdc such as ITW/Paktron part# 225K100RA4 or equiv.
- Case connected to pin #1 on -46 and -48 models. Case connected to pin #2 on -18 models

External Output Trimming: Output may be externally trimmed \pm 10%.

Remote ON/Off Control (pin 4) common referenced to - Input (pin 2).
On greater than 2.5 Vdc or open circuit
Off less than 0.8 Vdc

PIN CONNECTIONS

Single Output

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

PIN CONNECTIONS

dual Outputs

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

11/01/2001