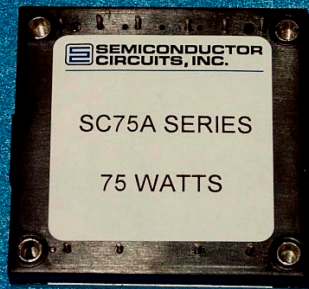


# SC75A Series



## DC/DC

### 75 Watts

Single Outputs

- 4:1 ultra wide input range  
18-75 Vdc
- Remote shutdown
- 400kHz switching frequency
- Continuous short circuit protection
- Remote Sense
- Industry Standard footprint
- Under Voltage Lockout
- UL1950, cUL EN60950

## Specifications

### INPUT

|                            |  |
|----------------------------|--|
| Voltage Range              | 18-75 Vdc  |
| Filtering                  | All Models   |
| Reverse Polarity Protected | To Nominal Input Current<br>External Fuse Required |
| Remote On/Off Control      | All Models   |
| UVLO                       | <16 Vdc  |

### OUTPUT

|                          |                            |
|--------------------------|----------------------------|
| Voltage Tolerance        | ± 1%                       |
|                          | ± 1.5% (3.3 Vdc)           |
| Ripple and Noise         | 1% V out pk-pk (20 MHz BW) |
| Short Circuit Protection | Continuous Power Cycle     |
| Temperature Coefficient  | 0.02% / °C                 |

### GENERAL

|                     |              |
|---------------------|--------------|
| Regulation:         |              |
| Line                | 0.25%        |
| Load                | 0.50%        |
| Efficiency          | 80-85% (typ) |
| I/O Isolation       | 1500 Vdc     |
| Switching Frequency | 400khz (typ) |

### ENVIRONMENTAL

|                       |   |
|-----------------------|---|
| Operating Temperature | Fully specified from -40°C<br>to +60°C<br>105°C Max Baseplate |
| 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 75-Watt SC75A Series operates over an ultra wide input range of 18-75 Vdc. Efficiencies of 83% are typical over varying load conditions of 25% to 100%. Additional features include input reverse polarity protection, remote on/off control, logic compatible with CMOS or open collector TTL, short circuit protection with auto restart, overvoltage protection, and an operating temperature range of -40°C to +60°C. Units are packaged in an industry standard 1/2 brick package and measure 2.40" x 2.28" x 0.50".

### Applications

These units are ideally suited for telecommunications and applications having a widely varying input voltage such as automotive test equipment, process control, minicomputers and geosurvey equipment.



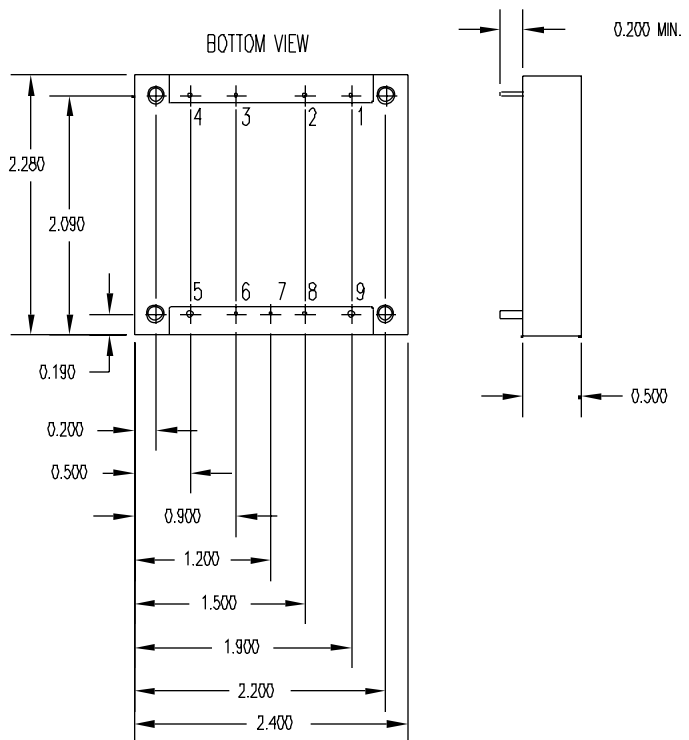
**SEMICONDUCTOR  
CIRCUITS, INC.**

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

# SC75A Series Ordering Information

| Input Voltage Range | Output Voltage | Output Current | Model Number    |
|---------------------|----------------|----------------|-----------------|
| 18-75 Vdc           | 3.3 Vdc        | 15.0 A         | SC75A17-1500-48 |
| 18-75 Vdc           | 5 Vdc          | 15.0 A         | SC75A11-1500-48 |
| 18-75 Vdc           | 12 Vdc         | 6.25 A         | SC75A12-625-48  |
| 18-75 Vdc           | 15 Vdc         | 5.0 A          | SC75A13-500-48  |
| 18-75 Vdc           | 24 Vdc         | 3.0 A          | SC75A14-300-48  |

## Dimensions and Connections



### NOTES:

1. Ripple measured with a 3.3  $\mu$ F tantalum capacitor across each output.

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

Remote ON/Off Control (pin3) common referenced to Minus Input (pin 1).

On greater than 4 Vdc or open circuit  
Off less than 1.2 Vdc

### PIN CONNECTIONS

1. - INPUT
2. CASE
3. ON/OFF CONTROL
4. + INPUT
5. + OUTPUT
6. + SENSE
7. TRIM
8. - SENSE
- 9 - OUTPUT

### PIN DIAMETERS

PINS 1-4, 6-8      0.040  $\pm$  0.002  
PINS 5, 9          0.080  $\pm$  0.002

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