DC / DC CONVERTER
MODEL SDC 12.1
(12 WATTS SINGLE OUTPUT)

APPLICATION:

* control circuits

* instrumentation

* train & mobile applications

DESCRIPTION:

SDC 12.1 is a non-isolated BUCK regulator of only 25 x 25 x 75mm (1 x 1 x 3 inch) size. This module provides an output of 12 to 15 Watts. The efficiency ranges from 0.71 to 0.82.

The input voltage can be varied over a wide range without affecting the output.
The load related regulation is very precise.

The module features overvoltage protection, and falls out of regulation at a load of about 630mA (15 W). The output voltage drops and the input current is reduced to feature foldback current limitation.

To turn the regulator on again it is necessary to reduce the output load current to about 30 % of its nominal value.

When the input voltage rises above 150 V, or the temperature of the modules gets too high, the same effect takes place. The module is protected against excessive operating conditions.

Even so the module is protected against short circuits, we do not recommend to start the module in short circuit mode. A permanent short circuit at the output will overload the unit and can destroy it.

Modules with other input and output voltages can be delivered on request.

E-mail: info@schockpower.com Web-site: www.schockpower.com

technical DATA

TECHNICAL DATA:

ALL SPECIFICATIONS ARE MEASURED
AT 110 VOLT INPUT AND 25 ^{0}C

I N P U T :

DC/DC VOLTAGE: 50 V MIN
110 V NOM
150 V MAX

NO LOAD INPUT CURRENT:
11mA AT 60 V INPUT 660mW
14mA AT 150 V INPUT 2100mW

EFFICIENCY AT 12 W:
0.82 AT 75 V INPUT
0.77 AT 110 V INPUT
0.71 AT 145 V INPUT

MECHANICAL DIMENSIONS:

1 x 1 x 3 "
25 x 25 x 75 mm

WEIGHT: 3.2 oz / 90 grams

O U T P U T:

OUTPUT POWER:
12 (15) WATTS

OUTPUT VOLTAGE:
+ 24 +/- 0.5 V

OUTPUT CURRENT:
400mA (10W)
IF INPUT VOLTAGE IS HELD UNDER
120 V: 600mA (15 W)

OUTPUT RIPPLE:
AT 140 V INPUT 300 mV/pp
AT 110 V INPUT 200 mV/pp
AT 70 V INPUT 100 mV/pp

OUTPUT VARIATION:
150 mV AT 60 TO 140 V
INPUT VOLTAGE VARIATION

CHANGES WITHOUT NOTICE.

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