

SDC65P SERIES 65 WATT DC TO DC CONVERTERS

OUTPUT SPECIFICATIONS

Output Voltage:	See Rating Chart
Output Current:	See Rating Chart
Total Output Power:	65 watts maximum
Ripple and Noise:	1% peak to peak max.
Overvoltage Protection:	Set at 112-132% of its nominal output voltage
Overcurrent Protection:	All outputs protected to short circuit conditions
Temperature Coefficient:	All outputs, $\pm 0.04\%$ / °C maximum
Transient Response:	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 μ s after a 25% step load change

FEATURES

- ◆ Low Cost
- ◆ Small, lightweight construction
- ◆ Three wide input ranges, 10-30 VDC, 20-60 VDC & 30-90 VDC
- ◆ Overvoltage protection
- ◆ Overcurrent protection
- ◆ 100% burn-in

DESCRIPTION

The SDC65P series of DC to DC converters provide up to 65 watts of continuous output power. Available in three standard input ranges of 10-30 VDC, 20-60 VDC and 30-90 VDC, they are ideal for a variety of applications including telecoms, process control, portable equipment and vehicle-mounted instrumentation. All units are available in compact "open PCB" or "enclosed" mechanical formats.

INPUT SPECIFICATION

Input Voltage:	10 to 30 VDC (SDC65P "L") 20 to 60 VDC (SDC65P "M") 30 to 90 VDC (SDC65P "H")
Input Current:	4.1A (rms) for 24 VDC 2.1A (rms) for 48VDC 1.5A (rms) for 72 VDC

GENERAL SPECIFICATIONS

Switching Frequency:	32kHz \pm 5kHz
Efficiency:	70% min. at max. output power
Line Regulation:	$\pm 0.5\%$ maximum at full load
Withstand Voltage:	1,000 VDC from input to output
MTBF:	400,000 hours minimum full load at 25°C ambient

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:	0° to +70° C
Storage Temperature:	-40° C to +85° C
Relative Humidity:	5% to 95% non-condensing
Derating:	Derate from 100% at +50°C linearly to 50% at +70° C

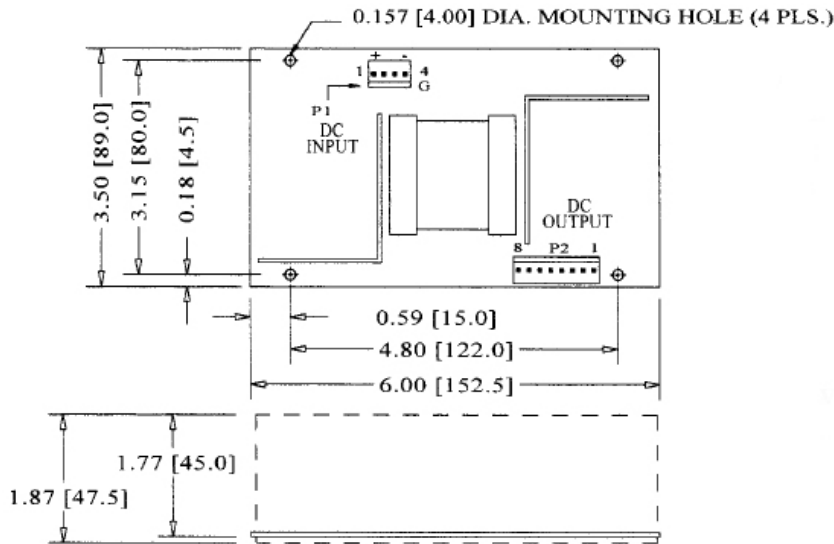


OUTPUT VOLTAGE/CURRENT RATING CHART

Model	Output #1				Output #2				Output #3				Output #4				Max. Power
	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	
SDC65P10	5V	0A	10A	1%	(N/A)				(N/A)				(N/A)				50W
SDC65P12	12V	0A	5.5A	1%	(N/A)				(N/A)				(N/A)				65W
SDC65P13	15V	0A	4.5A	1%	(N/A)				(N/A)				(N/A)				65W
SDC65P14	24V	0A	3.0A	1%	(N/A)				(N/A)				(N/A)				65W
SDC65P23	+5V	1A	6.0A	3%	+12V	0.5A	3A	5%	(N/A)				(N/A)				65W
SDC65P24	+5V	1A	6.0A	3%	+15V	0.4A	3A	5%	(N/A)				(N/A)				65W
SDC65P25	+5V	1A	6.0A	3%	+24V	0.3A	2A	5%	(N/A)				(N/A)				65W
SDC65P30	+5V	1A	6.0A	3%	+12V	0.5A	3A	5%	-5V	0.1A	0.5A	10%	(N/A)				65W
SDC65P31	+5V	1A	6.0A	3%	+12V	0.5A	3A	5%	-12V	0.1A	0.5A	10%	(N/A)				65W
SDC65P32	+5V	1A	6.0A	3%	+15V	0.4A	3A	5%	-15V	0.1A	0.5A	10%	(N/A)				65W
SDC65P33	+5V	1A	6.0A	3%	+15V	0.4A	3A	5%	-12V	0.1A	0.5A	10%	(N/A)				65W
SDC65P39	+5V	1A	6.0A	3%	+24V	0.3A	2A	5%	-12V	0.1A	0.5A	10%	(N/A)				65W
SDC65P40	+5V	1A	6.0A	3%	+12V	0.5A	3A	5%	-12V	0.1A	0.5A	10%	-5V	0.1A	0.5A	10%	65W

- Notes: (1) All multi-output units may be operated at no-load without damage. At no-load, output tolerance increases to 10%.
 (2) Suffix codes for mechanical format and input range are as follows: SDC65-XYZ: "XX" is the model code from the above table; "Y" is the input range (L= 10 ~ 30 VDC, M = 20 ~ 60 VDC, H = 30 ~ 90 VDC) and "Z" is the mechanical format (A = open PCB, B = L-bracket, C = enclosed). Example: SDC65P31MC (20-60 VDC input range and enclosed format).
 (3) The models for 10-30 VDC input range are suitable only for 70% of the above stated maximum output power.

MECHANICAL SPECIFICATIONS



Notes:

- Dimensions shown in inch (mm)
- Tolerance 0.02 (0.5) maximum
- Input connector mates with Molex housing 09-50-3031 and Molex 2878 series crimp terminal.
- Output connector mates with Molex housing 09-50-3081 and Molex 2878 series crimp terminal.
- Weight: 380 grams (PCB format)
- Mechanical details of L-bracket and enclosed formats available upon request.

PIN CHART

Model	Pin	1	2	3	4	5	6	7	8
SDC65P10	SDC65P12	Output #1	Output #1	Output #1	Output #1	Return	Return	Return	Return
SDC65P13	SDC65P14	Output #1	Output #1	Output #1	Output #1	Return	Return	Return	Return
SDC65P23	SDC65P24	Output #1	Output #1	Common Return	Common Return	Output #2	Output #2	N.C.	N.C.
SDC65P30	SDC65P31	Output #1	Output #1	Common Return	Common Return	Output #2	Output #2	Output #3	N.C.
SDC65P32	SDC65P33	Output #1	Output #1	Common Return	Common Return	Output #2	Output #2	Output #3	N.C.
SDC65P39		Output #1	Output #1	Common Return	Common Return	Output #2	Output #2	Output #3	N.C.
SDC65P40		Output #1	Output #1	Common Return	Common Return	Output #2	Output #2	Output #3	Output #4

Note: All data are subject to change without notice