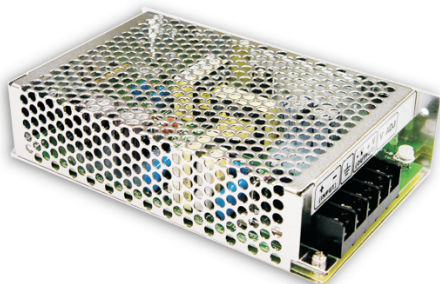




50W Single Output DC-DC Converter

SD-50 series



■ Features :

- 2:1 wide input range
- Protections: Short circuit/Over load/Over voltage
- 1500VDC I/O isolation
- Built-in EMI filter, low ripple noise
- 100% full load burn-in test
- Fixed switching frequency at 83KHz
- Low cost
- High reliability
- 1 year warranty



SPECIFICATION

MODEL	SD-50A-5	SD-50B-5	SD-50C-5	SD-50A-12	SD-50B-12	SD-50C-12	SD-50A-24	SD-50B-24	SD-50C-24	
OUTPUT	DC VOLTAGE	5V			12V			24V		
	RATED CURRENT	10A			4.2A			2.1A		
	CURRENT RANGE	0 ~ 10A			0 ~ 4.2A			0 ~ 2.1A		
	RATED POWER	50W			50.4W			50.4W		
	RIPPLE & NOISE (max.) Note.2	100mVp-p			120mVp-p			150mVp-p		
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC			11 ~ 16VDC			23 ~ 30VDC		
	VOLTAGE TOLERANCE Note.3	±2.0%			±1.0%			±1.0%		
	LINE REGULATION	±0.5%			±0.3%			±0.2%		
	LOAD REGULATION	±0.5%			±0.3%			±0.2%		
SETUP, RISE, HOLD TIME	2.5s, 50ms, ----- at full load									
INPUT	VOLTAGE RANGE	A:9.2 ~ 18VDC		B:19 ~ 36VDC		C:36 ~ 72VDC				
	EFFICIENCY (Typ.)	70%	73%	76%	72%	75%	78%	74%	80%	83%
	DC CURRENT	7A/12V			3A/24V			1.5A/48V		
PROTECTION	OVER LOAD	105 ~ 150% rated output power Protection type : Fold back current limiting, recovers automatically after fault condition is removed								
	OVER VOLTAGE	5.75 ~ 6.75V/10% load			16.8 ~ 20V/10% load			31.5 ~ 37.5V/10% load		
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes								
SAFETY & EMC (Note 4)	SAFETY STANDARDS	Design refer to LVD								
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC								
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B								
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,6,8; ENV50204, EN55024, heavy industry level, criteria A								
	MTBF	365.6K hrs min.(SD-50A)		357.5K hrs min.(SD-50B)		368.5K Hrs min.(SD-50C)		MIL-HDBK-217F (25°C)		
	DIMENSION	159*97*38mm (L*W*H)								
NOTE	PACKING	0.53Kg; 24pcs/12.7Kg/0.75CUFT								
		1. All parameters NOT specially mentioned are measured at 12,24,48VDC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.								

File Name:SD-50-SPEC 2003-12-26



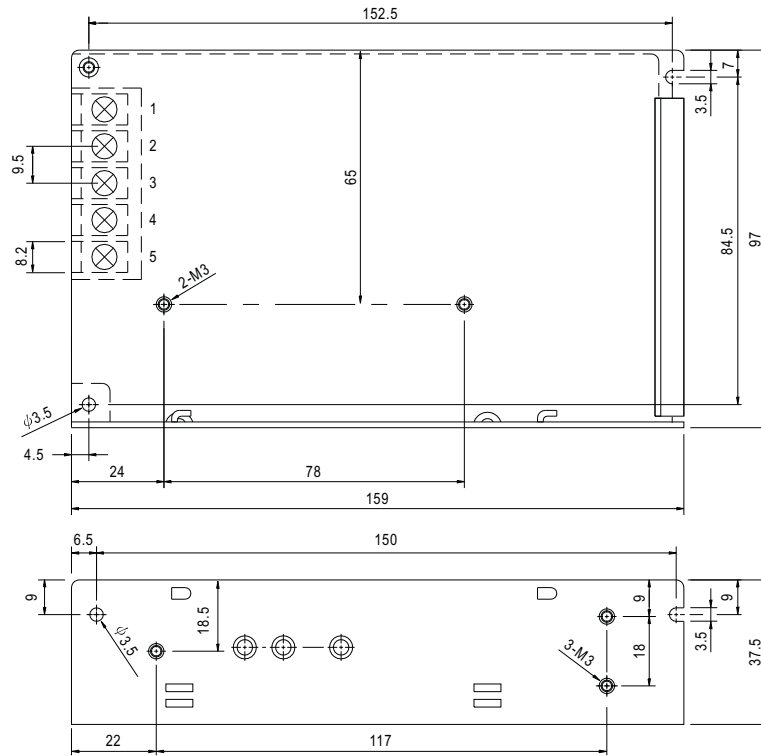


50W Single Output DC-DC Converter

SD-50 series

■ Mechanical Specification

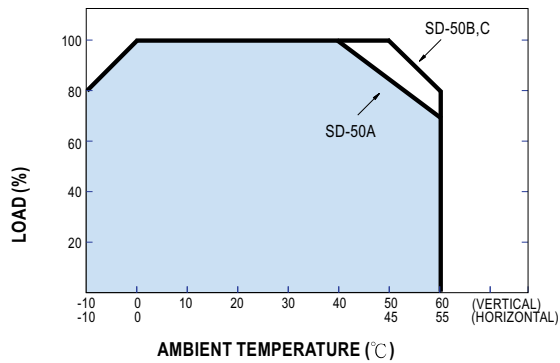
Case No. 901 Unit:mm



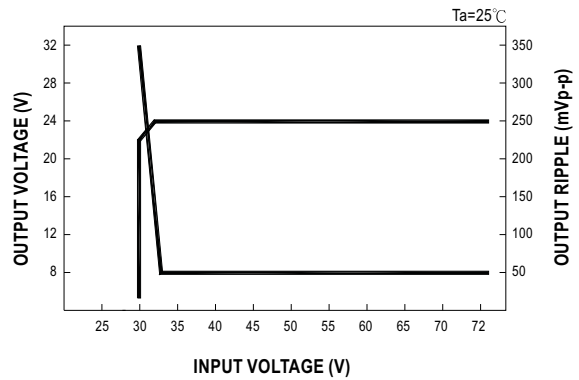
Terminal Pin. No Assignment

Pin No.	Assignment	Pin No.	Assignment
1	DC INPUT V+	4	DC OUTPUT -V
2	DC INPUT V-	5	DC OUTPUT +V
3	FG \pm		

■ Derating Curve



■ Static Characteristics(SD-50C-24V)



File Name:SD-50-SPEC 2003-10-26



We are here for you. Addresses and Contacts

Sales Switzerland

Matthias Rüegg
Ruhbergstrasse 32
CH-9230 Flawil

Tel. +41 (0) 44 877 35 18
Mobil +41 (0) 76 491 66 66
Fax +41 (0) 44 877 35 19

matthias.rueegg@pewatron.com

Sales Germany

Baden-Württemberg Region
(Postcode 60000–79999)

Dieter Hirthe
Mühlweg 23
D-71554 Weissach i.T.

Phone +49 (0) 71 91 49 60 58
Mobile +49 (0) 163 76 27 430
Fax +49 (0) 71 91 93 31 88

dieter.hirthe@pewatron.com

Rest of Germany

Kurt Stritzelberger
Neumarkter Str. 86a
D-81673 Munich

Phone +49 (0) 89 260 38 47
Mobile +49 (0) 17 18 03 41 35
Fax +49 (0) 89 43 10 91 91

kurt.stritzelberger@pewatron.com

Sales Austria

Kurt Stritzelberger
Neumarkter Str. 86a
D-81673 Munich

Phone +49 (0) 89 260 38 47
Mobile +49 (0) 17 18 03 41 35
Fax +49 (0) 89 43 10 91 91

kurt.stritzelberger@pewatron.com

Sales Other Countries

PEWATRON AG
Thurgauerstrasse 66
CH-8052 Zurich

Phone +41 (0) 44 877 35 00
Fax +41 (0) 44 877 35 25

info@pewatron.com
www.pewatron.com

Sensors

Physical Sensors
Peter Felder
Phone +41 (0) 44 877 35 05
peter.felder@pewatron.com

Geometrical Sensors
Eric Letsch
Phone +41 (0) 44 877 35 14
eric.letsch@pewatron.com

Power Supplies

DC-DC Converters
Switching Power Supplies
DC-AC Inverters
Sebastiano Leggio
Phone +41 (0) 44 877 35 06
sebastiano.leggio@pewatron.com

E-Components

Current Converters
Motors
Claudio Chiffi
Phone +41 (0) 44 877 35 03
claudio.chiffi@pewatron.com

Man Machine Interface
Measurement Probes
Sebastiano Leggio
Phone +41 (0) 44 877 35 06
sebastiano.leggio@pewatron.com

Drives

DC Drives
AC Asynchronous Motors
Stepper Motors
Servomotors
Electrical Linear Drives
DC Controllers
Servo Controllers
Frequency Converters
Switched-mode Power Supplies
Couplings
Claudio Chiffi
Phone +41 (0) 44 877 35 03
claudio.chiffi@pewatron.com