



■ Features :

- Wide 2:1 DC input range
- In/out capacitance 1000pF
- Protections: Short circuit / Overload / Over voltage
- 1000VDC I/O isolation for D/D
- Cooling by free air convection
- Built-in remote ON-OFF control
- 100% full load burn-in test
- Fixed switching frequency at 225KHz
- Lost cost
- High reliability
- 1 year warranty



SPECIFICATION

MODEL	SDM30-12S3	SDM30-24S3	SDM30-48S3	SDM30-12S5	SDM30-24S5	SDM30-48S5
OUTPUT	DC VOLTAGE			3.3V		
	RATED CURRENT			5A		
	CURRENT RANGE			0 ~ 5A		
	RATED POWER			16.5W		
	RIPPLE & NOISE (max.) Note.2			75mVp-p		
	VOLTAGE TOLERANCE Note.3			±3.0%		
	LINE REGULATION			±1.0%		
	LOAD REGULATION			±1.0%		
TRIM OUTPUT			±13%(Typ.) output voltage			
INPUT	RATED DC INPUT					
	12S: 12VDC 24S: 24VDC 48S: 48VDC					
	VOLTAGE RANGE					
	12S: 9.2 ~ 18VDC 24S: 18 ~ 36VDC 48S: 36 ~ 72VDC					
	EFFICIENCY (Typ.)					
77% 79% 80% 77% 79% 80%						
DC CURRENT						
12S:3.6A 24S:2A 48S:1A						
IDLE CURRENT						
12S:35mA 24S/48S:30mA						
PROTECTION	OVERLOAD					
	Above 105% rated output power Protection type : Over power limiting, recovers automatically after fault condition is removed					
	OVER VOLTAGE					
3.8 ~ 4.95V 5.75 ~ 7.5V Protection type : Shut off o/p voltage, clamping by zener diode						
SHORT CIRCUIT						
Protection type : Constant current limiting, recovers automatically after fault condition is removed						
FUNCTION	ON/OFF CONTROL					
Logic "1" or open: power on Logic "0" short to Vin-: power off						
ENVIRONMENT	WORKING TEMP.					
	-25 ~ +85°C (Refer to "Derating Curve")					
	STORAGE TEMP., HUMIDITY					
-25 ~ +85°C, 0 ~ 95% RH						
TEMP. COEFFICIENT						
±0.03%/°C (0~50°C)						
SAFETY & EMC (Note 6)	SAFETY STANDARDS					
	Design refer to LVD					
	ISOLATION VOLTAGE					
	I/P-O/P:1KVDC					
ISOLATION RESISTANCE						
I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH						
EMC EMISSION						
Compliance to EN55022 (CISPR22) Class B						
EMC IMMUNITY						
Compliance to EN61000-2,3,4,6,8, EN55024, light industry level, criteria A						
OTHERS	MTBF					
	322.4K hrs min. MIL-HDBK-217F (25°C)					
	DIMENSION					
50.8*50.8*16mm (2"*2"*0.63") (L*W*H)						
PACKING						
0.1Kg; 150pcs/15.8Kg/0.97CUFT						
NOTE	<ol style="list-style-type: none"> 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. Short circuit not more than 60 second. 5. DC source wires ≥ 5cm, an input external al capacitor 47 ~ 100uF is required. 6. 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. 					



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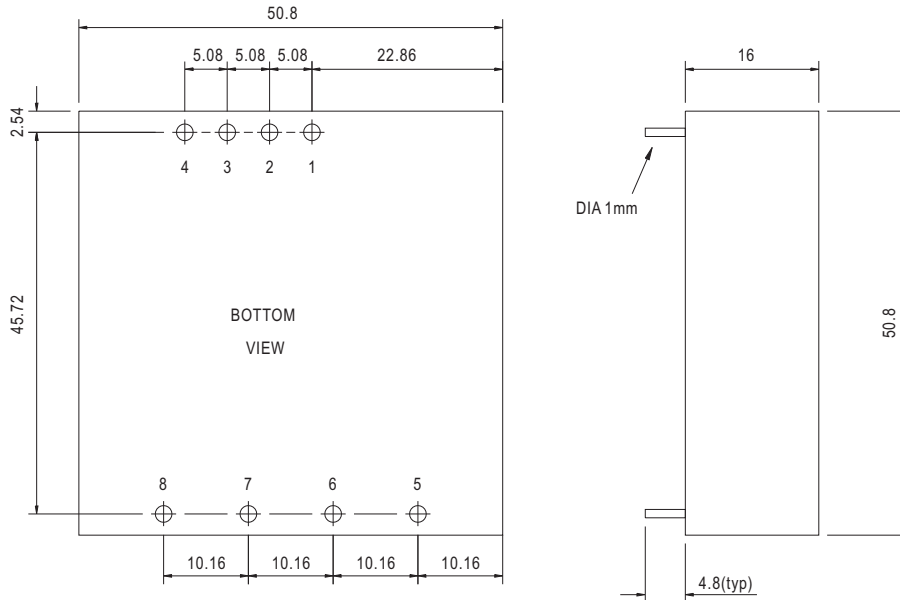


SPECIFICATION

MODEL	SDM30-12S12	SDM30-24S12	SDM30-48S12	SDM30-12S15	SDM30-24S15	SDM30-48S15
OUTPUT	DC VOLTAGE			12V		
	RATED CURRENT			2.1A		
	CURRENT RANGE			0 ~ 2.1A		
	RATED POWER			25.2W		
	RIPPLE & NOISE (max.) Note.2			100mVp-p		
	VOLTAGE TOLERANCE Note.3			±2.0% max.		
	LINE REGULATION			±1.0%		
	LOAD REGULATION			±1.0%		
TRIM OUTPUT			±13%(Typ.) output voltage			
INPUT	RATED DC INPUT					
	12S: 12VDC 24S: 24VDC 48S: 48VDC					
	VOLTAGE RANGE					
	12S: 9.2 ~ 18VDC 24S: 18 ~ 36VDC 48S: 36 ~ 72VDC					
	EFFICIENCY (Typ.)					
80% 82% 84% 80% 83% 85%						
DC CURRENT						
12S:3.6A 24S:2A 48S:1A						
IDLE CURRENT						
12S:35mA 24S/48S:30mA						
PROTECTION	OVERLOAD					
	Above 105% rated output power Protection type : Over power limiting, recovers automatically after fault condition is removed					
	OVER VOLTAGE					
13.8 ~ 18V 17.25 ~ 22.5V Protection type : Shut off o/p voltage, clamping by zener diode						
SHORT CIRCUIT						
Protection type : Constant current limiting, recovers automatically after fault condition is removed						
FUNCTION	ON/OFF CONTROL					
Logic "1" or open: power on Logic "0" short to Vin-: power off						
ENVIRONMENT	WORKING TEMP.					
	-25 ~ +85°C (Refer to "Derating Curve")					
	STORAGE TEMP., HUMIDITY					
-25 ~ +85°C, 0 ~ 95% RH						
TEMP. COEFFICIENT						
±0.03%/°C (0~50°C)						
SAFETY & EMC (Note 6)	SAFETY STANDARDS					
	Design refer to LVD					
ISOLATION VOLTAGE						
I/P-O/P:1KVDC						
ISOLATION RESISTANCE						
I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH						
EMC EMISSION						
Compliance to EN55022 (CISPR22) Class B						
EMC IMMUNITY						
Compliance to EN61000-2,3,4,6,8, EN55024, light industry level, criteria A						
OTHERS	MTBF					
	322.4K hrs min. MIL-HDBK-217F (25°C)					
	DIMENSION					
50.8*50.8*16mm (2**2**0.63") (L*W*H)						
PACKING						
0.1Kg; 150pcs/15.8Kg/0.97CUFT						
NOTE	<ol style="list-style-type: none"> 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. Short circuit not more than 60 second. 5. DC source wires ≥5cm, an input external al capacitor 47 ~ 100uF is required. 6. 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. 					

Mechanical Specification

Case No. SDM-30 Unit:mm

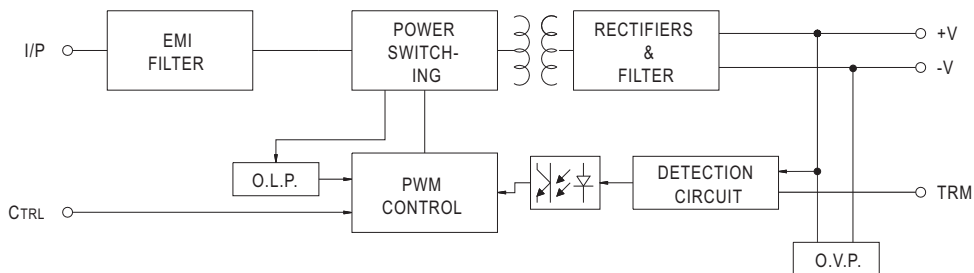


Pin No. Assignment

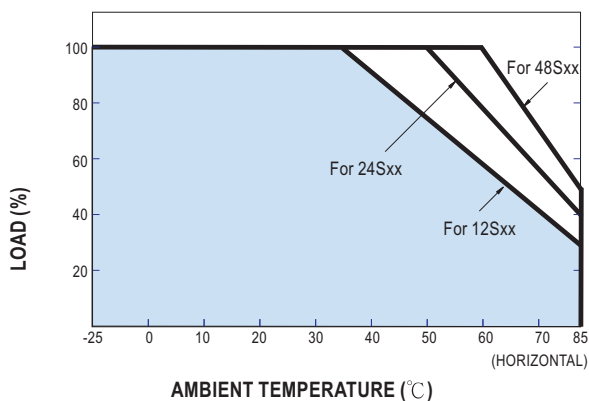
Pin No.	Assignment	Pin No.	Assignment
1	+Vin	6	+Vout
2	-Vin	7	-Vout
3,5	No pin	8	Trim
4	Control ON/OFF		

Block Diagram

fosc : 225KHz

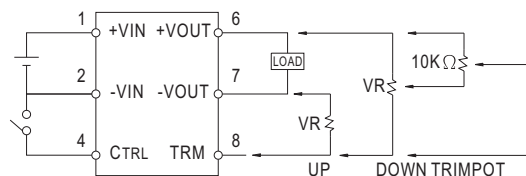


Derating Curve



External Output Trimming

OUTPUT MAY OPTIONALLY BE EXTERNALLY TRIMMED($\pm 13\%$)
A FIXED RESISTOR OR AN EXTERNAL TRIMPOT AS SHOWN



ON/OFF Control Pin

CONTROL INPUT.....PIN4
CONTROL COMMON.....PIN2
LOGIC COMPATIBILITY.....CMOS OR OPEN COLLECTOR TTL
CONTROL VOLTAGE
ON.....+5.5VDC min OR OPEN CIRCUIT
OFF.....+2.5VDC max. OR SHORT TO PIN2