



- 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			5V		
	RATED CURRENT	5A			5A		
	CURRENT RANGE	0 ~ 5A			0 ~ 5A		
	RATED POWER	16.5W			25W		
	RIPPLE & NOISE (max.) Note.2	75mVp-p			75mVp-p		
	VOLTAGE TOLERANCE Note.3	±3.0%			±2.0% max.		
	LINE REGULATION	±1.0%			±1.0%		
	LOAD REGULATION	±1.0%			±1.0%		
TRIM OUTPUT	±13%(Typ.) output voltage			±10%(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		
	SHORT CIRCUIT	Protection type : Shut off o/p voltage, clamping by zener diode 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 output load 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					
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B					
OTHERS	EMS IMMUNITY	Compliance to EN61000-2,3,4,6,8; ENV50204, EN55024, light industry level, criteria A					
	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	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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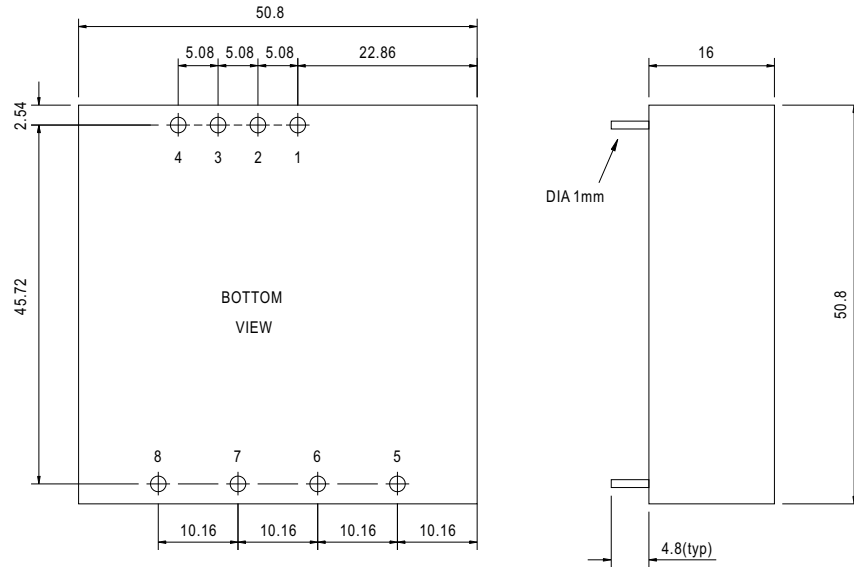


SPECIFICATION

MODEL	SDM30-12S12	SDM30-24S12	SDM30-48S12	SDM30-12S15	SDM30-24S15	SDM30-48S15	
OUTPUT	DC VOLTAGE			12V			15V
	RATED CURRENT			2.1A	2.5A	1.7A	2A
	CURRENT RANGE			0 ~ 2.1A	0 ~ 2.5A	0 ~ 1.7A	0 ~ 2A
	RATED POWER			25.2W	30W	25.5W	30W
	RIPPLE & NOISE (max.) Note.2			100mVp-p			100mVp-p
	VOLTAGE TOLERANCE Note.3			±2.0% max.			±2.0% max.
	LINE REGULATION			±1.0%			±1.0%
	LOAD REGULATION			±1.0%			±1.0%
TRIM OUTPUT			±10%(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 output load derating curve)			
	STORAGE TEMP., HUMIDITY			-25 ~ +85°C, 0 ~ 95% RH			
	TEMP. COEFFICIENT			±0.03%/°C (0~50°C)			
	SAFETY STANDARDS			Design refer to LVD			
SAFETY & EMC (Note 6)	ISOLATION VOLTAGE			I/P-O/P: 1KVDC			
	ISOLATION RESISTANCE			I/P-O/P: 100M Ohms/500VDC			
	EMI CONDUCTION & RADIATION			Compliance to EN55022 (CISPR22) Class B			
	EMS IMMUNITY			Compliance to EN61000-2, 3, 4, 6, 8; ENV50204, 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	<p>1. All parameters NOT specially mentioned are measured at 12,24,48VDC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>4. Short circuit not more than 60 second.</p> <p>5. DC source wires \geq 5cm, an input external al capacitor 47 ~ 100uF is required.</p> <p>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.</p>						

Mechanical Specification

Case No. SDM-30 Unit:mm

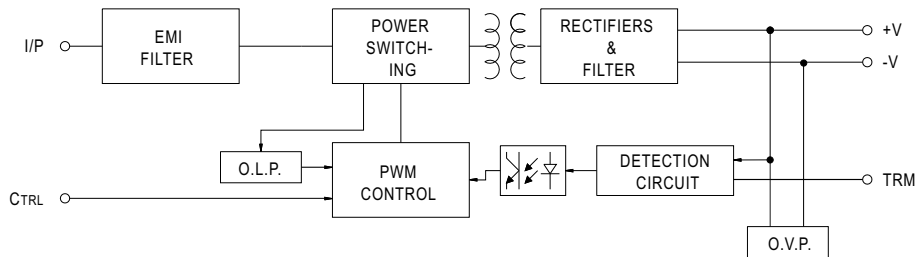


Pin No. Assignment

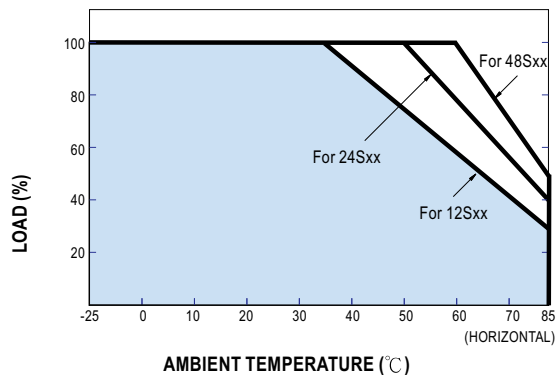
Pin No.	Assignment	Pin No.	Assignment
1	+Vin	6	+Vout
2	-Vin	7	-Vout
3,5	No pin	8	Trim
4	Control ON/OFF		

Block Diagram

fosc : 225KHz

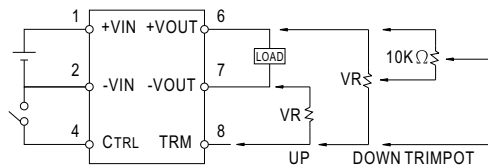


Derating Curve



External Output Trimming

OUTPUT MAY OPTIONALLY BE EXTERNALLY TRIMMED(±10%)
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