



■ 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
- Low cost
- High reliability
- 2 years warranty



**SPECIFICATION**

MODEL	SDM30-12S3	SDM30-24S3	SDM30-48S3	SDM30-12S5	SDM30-24S5	SDM30-48S5		
OUTPUT	DC VOLTAGE			5V				
	RATED CURRENT			5A				
	CURRENT RANGE			0 ~ 5A				
	RATED POWER			25W				
	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 EN55032 (CISPR32) 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	<p>1. All parameters NOT specially mentioned are measured at 12,24,48VDC input, rated load and 25°C of ambient temperature.                  2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 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. All the EMC tests are been executed by mounting the unit on a 230mm*230mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."</p>							



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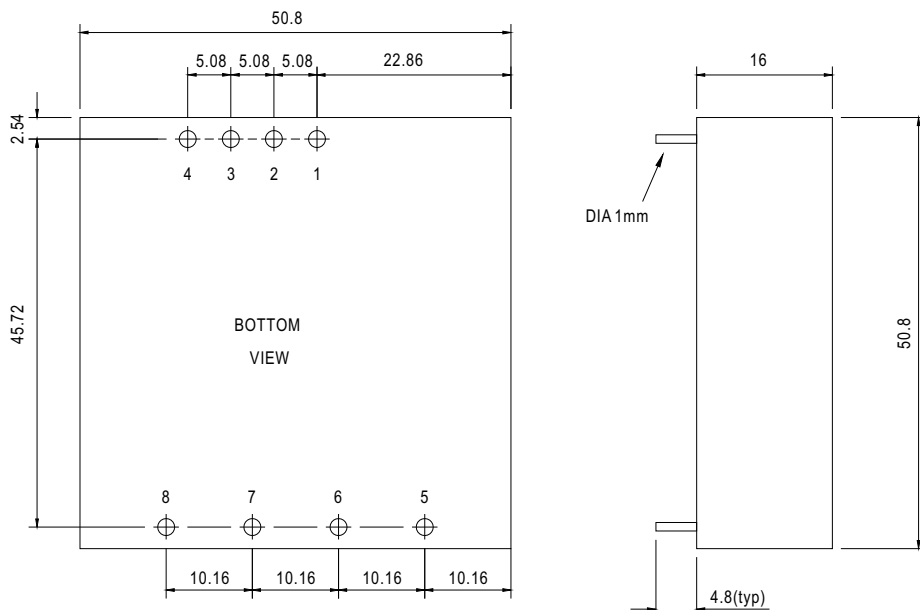


**SPECIFICATION**

MODEL	SDM30-12S12	SDM30-24S12	SDM30-48S12	SDM30-12S15	SDM30-24S15	SDM30-48S15		
OUTPUT	DC VOLTAGE			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		±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			
	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 EN55032 (CISPR32) Class B					
OTHERS	EMC IMMUNITY		Compliance to EN61000-2,3,4,6,8, 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	<p>1. All parameters NOT specially mentioned are measured at 12,24,48VDC input, rated load and 25°C of ambient temperature.                  2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 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. All the EMC tests are been executed by mounting the unit on a 230mm*230mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."</p>							

**Mechanical Specification**

Case No. SDM-30 Unit:mm

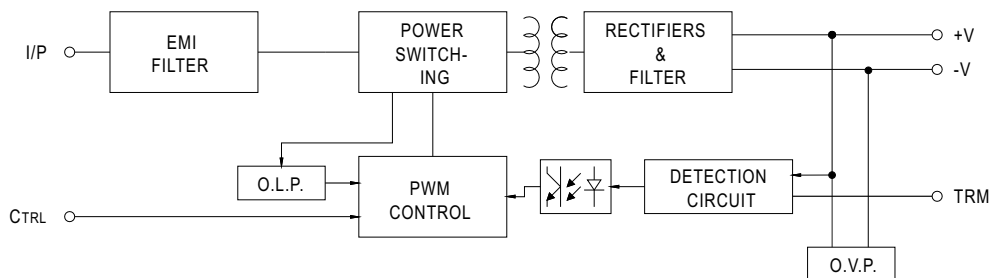


**Pin No. Assignment**

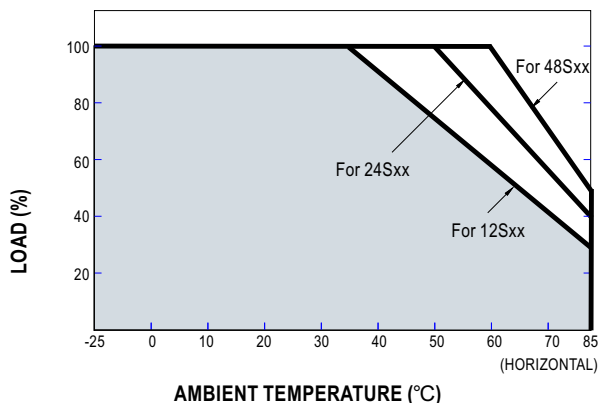
Pin No.	Assignment	Pin No.	Assignment
1	+Vin	6	+Vout
2	-Vin	7	-Vout
3,5	No pin	8	Trim
4	Control ON/OFF		

**Block Diagram**

fosc : 225KHz

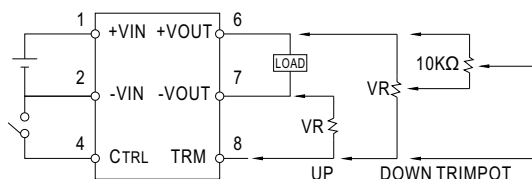


**Derating Curve**



**External Output Trimming**

OUTPUT MAY OPTIONALLY BE EXTERNALLY TRIMMED(±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