



MEAN WELL

SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

SDM30 SERIES

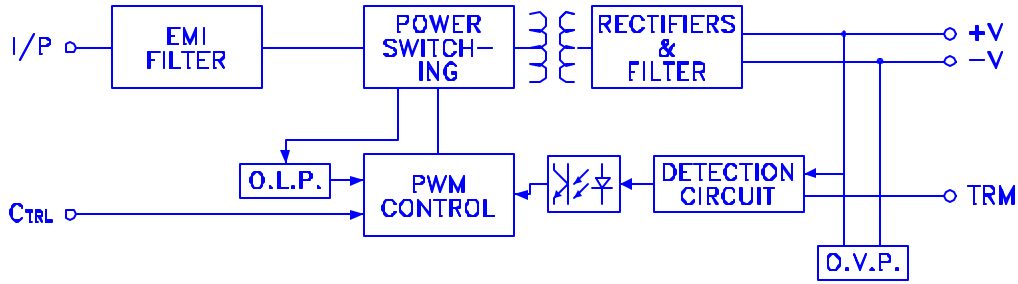
- .2:1 INPUT RANGE
- .SHORT CIRCUIT PROTECTION
- .BUILD IN EMI FILTER
- .OVERLOAD, OVER VOLTAGE PROTECTION
- .REMOTE ON-OFF CONTROL
- .LOW RIPPLE NOISE



SPECIFICATION	MODEL	SDM30-12S3	SDM30-24S3	SDM30-48S3	SDM30-12S5	SDM30-24S5	SDM30-48S5	SDM30-12S12	SDM30-24S12	SDM30-48S12	SDM30-12S15	SDM30-24S15	SDM30-48S15
DC OUTPUT VOLTAGE		3.3V			5V			12V			15V		
OUTPUT V. TOLERANCE		±3%			±2% MAX.								
OUTPUT RATED CURRENT		5A			5A			2.1A	2.5A		1.7A	2A	
OUTPUT CURRENT RANGE		0-5A			0-5A			0-2.1A	0-2.5A		0-1.7A	0-2A	
RIPPLE & NOISE		75mVp-p			75mVp-p			100mVp-p			100mVp-p		
DC OUTPUT POWER		16.5W			25W			25.2W	30W		25.5W	30W	
LINE REGULATION		±1%											
LOAD REGULATION		±1%											
EFFICIENCY		77%	79%	80%	77%	79%	80%	80%	82%	84%	80%	83%	85%
RATED DC INPUT		12S:12VDC			24S:24VDC			48S:48VDC					
INPUT VOLTAGE RANGE		12S:9.2 ~ 18VDC			24S:18 ~ 36VDC			48S:36 ~ 72VDC					
INPUT CURRENT		12S:3.6A			24S:2A			48S:1A					
TRIM OUTPUT		±13%(TYP.) OUTPUT VOLTAGE				±10%(TYP.) OUTPUT VOLTAGE							
IDLE CURRENT		12S:35mA			24S/48S:30mA								
OVERLOAD PROTECTION		ABOVE 105% TYPE:OVER POWER LIMITING RESET:AUTO RECOVERY											
SHORT CIRCUIT PROTECTION		CONTINUOUS RESET:AUTO RECOVERY											
OVER VOLTAGE PROTECTION		115-150%											
ON/OFF CONTROL		LOGIC "1" OR OPEN:POWER ON LOGIC "0" SHORT TO VIN-:POWER OFF											
TEMP. COEFFICIENT		±0.03% / °C (0-50 °C)											
IN/OUT CAPACITANCE		1000PF											
ISOLATION VOLTAGE		I/P-O/P: 1.0KVDC											
ISOLATION RESISTANCE		I/P-O/P:500VDC / 100M Ohms											
WORKING TEMP., HUMIDITY		-25°C~+85°C(REFER TO OUTPUT DERATING CURVE)											
STORAGE TEMP., HUMIDITY		-25°C~+85°C, 0%~95%											
DIMENSION		2"x2"x0.63" (50.8x50.8x16.0mm)											
WEIGHT		100 gs											
SAFETY / EMI		DESIGN TO MEET: UL1950, EN60950, EN55022 ,FCC PART15J											

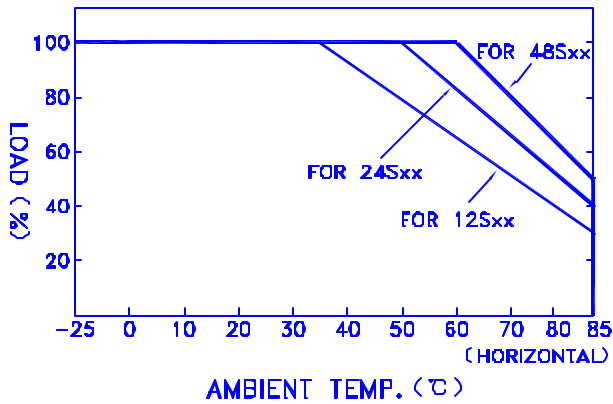
- NOTE :
- 1.ALL PARAMETERS ARE SPECIFIED AT RATED INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
 - 2.TOLERANCE : INCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
 - 3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
 - 4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
 - 5.LOAD REGULATION IS MEASURED FROM 10% TO 100% RATED LOAD.
 - 6.SHORT CIRCUIT NOT MORE THEN 60 SECONDS.
 - 7.DC SOURCE WIRES >=5cm, AN INPUT EXTERNAL AL CAPACITOR 47-100uF IS REQUIRED.

BLOCK DIAGRAM



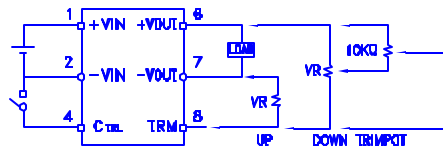
fosc : 225KHz

OUTPUT DERATING



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

DIMENSION (mm)

- ☒ CASE :
- ☒ PIN NO. ASSIGNMENT
 - ☒ PIN 1 : DC INPUT +V
 - ☒ PIN 2 : DC INPUT -V
 - ☒ PIN 3,5 : NO PIN
 - ☒ PIN 4 : CONTROL ON/OFF
 - ☒ PIN 6 : DC OUTPUT +V
 - ☒ PIN 7 : DC OUTPUT -V
 - ☒ PIN 8 : TRIM

