



THE DATASHEET OF SKM50B-05





■ Features :

- 2"x1" compact size
- 2:1 wide input range
- High efficiency up to 92%
- 1500VDC I/O isolation
- Built-in remote ON/OFF control
- Built-in trimming output
- Comply with CE / FCC without external components
- Protections: Short circuit / Overload / Input and Output Over voltage
- Cooling by free air convection
- Six-sided shield metal case
- 100% burn-in test
- Low cost / High reliability
- Approvals: FCC / EAC / CE / UKCA
- 2 years warranty

■ GTIN CODE

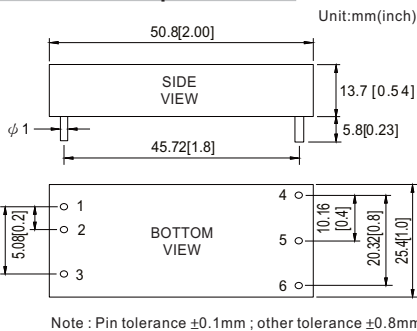
MW Search: <https://www.meanwell.com/serviceGTIN.aspx>



SPECIFICATION

ORDER NO.	SKM50B-05	SKM50C-05	SKM50B-12	SKM50C-12	SKM50B-15	SKM50C-15		
OUTPUT	DC VOLTAGE	5V		12V		15V		
	CURRENT RANGE	1 ~ 10A		0.41 ~ 4.17A		0.33 ~ 3.33A		
	RATED POWER	50W						
	RIPPLE & NOISE (max.) Note.2	60mVp-p		80mVp-p		100mVp-p		
	LINE REGULATION Note.3	±0.2%						
	LOAD REGULATION Note.4	±0.5%						
	VOLTAGE ACCURACY	±2.0%						
	SWITCHING FREQUENCY	300KHz typ.						
INPUT	EXTERNAL CAPACITANCE LOAD (max.)	1000uF						
	EXTERNAL TRIM Adj. RANGE(Typ.)	±10%		-20 ~ +10%		-20 ~ +10%		
	VOLTAGE RANGE	B: 18 ~ 36VDC C: 36 ~ 75VDC						
	UNDER VOLTAGE SHUTDOWN	B: 16VDC C: 32VDC						
	EFFICIENCY (Typ.)	91%	91%	92%	91%	90%	91%	
	DC CURRENT	Full load	2300mA	1160mA	2300mA	1160mA	2300mA	1160mA
		No load	110mA	60mA	110mA	60mA	110mA	60mA
	FILTER	Pi network						
REMOTE CONTROL	Power ON : R.C ~ -Vin > 2.5VDC or open circuit ; Power OFF : R.C ~ -Vin < 0.5VDC or short							
PROTECTION	Fuse recommended							
PROTECTION (Note. 5)	OVER CURRENT	110% ~ 180% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed						
	SHORT CIRCUIT	All output equipped with short circuit Protection type : Hiccup mode, recovers automatically after fault condition is removed						
	OVER VOLTAGE	Input(Typ.)	B: >40 ~ 50VDC C: >80 ~ 100VDC input voltage Protection type : Shut down o/p voltage, recovers automatically after fault condition is removed					
Output(Typ.)		5Vo : 7V ~ 8.95V ; 12Vo : 15V ~ 19.2V ; 15Vo : 18V ~ 23.3V Protection type : Clamp by TVS diode						
ENVIRONMENT	WORKING TEMP.	-40 ~ +75°C (Refer to "Derating Curve")						
	CASE TEMP.	+115°C max.						
	WORKING HUMIDITY	20% ~ 90% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-55 ~ +125°C, 10 ~ 95% RH						
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 55°C)						
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
SAFETY & EMC	SAFETY STANDARDS	EAC TP TC 020/2011 (EAC TP TC 004 for 48Vin type only) approved						
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVDC						
	ISOLATION RESISTANCE	I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH						
	EMC EMISSION Note.5	Compliance to BS EN/EN55032 Class A, FCC part 15 Class A without external components, EAC TP TC 020						
OTHERS	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8, light industry level, criteria A, EAC TP TC 020						
	MTBF	700Khrs min. MIL-HDBK-217F(25°C)						
	DIMENSION	50.8*25.4*13.7 mm or 2**1**0.54" inch (L*W*H)						
PACKING	43g ; 10pcs/per tube, 320pcs/32 tube/per carton							

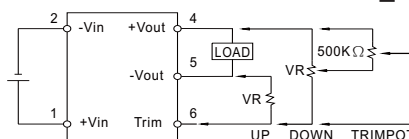
■ Mechanical Specification



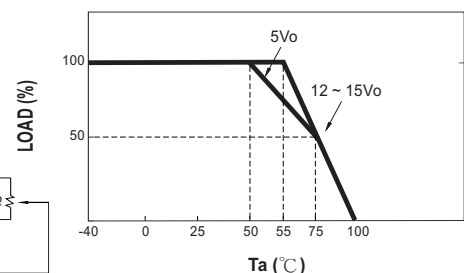
■ Pin Configuration

Pin No.	Output	Pin No.	Output
1	+Vin	4	+Vout
2	-Vin	5	-Vout
3	R.C	6	Trim

■ External Output Trimming



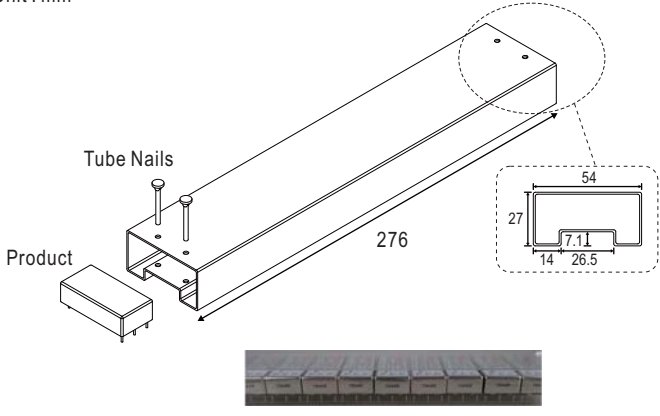

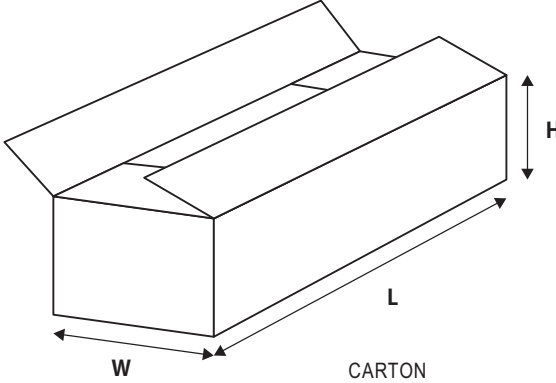
■ Derating Curve



NOTE

- 1.All parameters are specified at normal input, rated load, 25°C 70% RH ambient.
 - 2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
 - 3.Line regulation is measured from low line to high line at rated load.
 - 4.Load regulation is measured from 10% to 100% rated load.
 - 5.Consult MEAN WELL for deployment of Class B.
 - 6.Please prevent the converter from operating in overload or short circuit condition for more than 30 seconds.
- ※ Product Liability Disclaimer : For detailed information, please refer to <https://www.meanwell.com/serviceDisclaimer.aspx>

■ Packing

Standard Tube Packing	MPQ Per Tube (PCS)	One Tube G.W.	Max. Q'TY/ Carton(PCS)	One Carton G.W.
<p>Unit : mm</p>    <p>CARTON L600 x W230 x H220</p>	10	450g	320	15.2Kg

■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>

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- ✓ Cost Control Management
- ✓ Shortage Management
- ✓ Alternative Solution
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