15W DC-DC Regulated Single Output Converter — SKM15 series

■ Features :

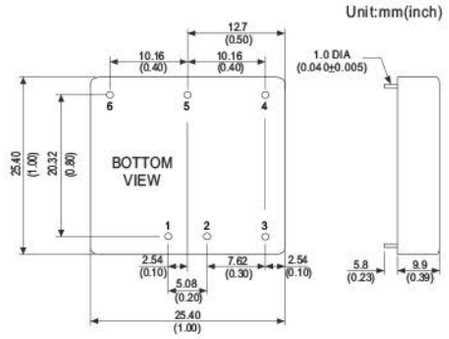
- 1"x1" compact size
- 2:1 wide input range
- High efficiency up to 88%
- 1500VDC I/O isolation
- Built-in remote ON/OFF control
- Built-in trimming output(±10%)
- Built-in EMI filter
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Six-sided shield metal case
- 100% burn-in test
- Low cost / High reliability
- Approvals: FCC / EAC / CE / UKCA
- 2 years warranty

SPECIFICATION

ORDER NO.			SKM15A-05	SKM15B-05	SKM15C-05	SKM15A-12	SKM15B-12	SKM15C-12	SKM15A-15	SKM15B-15	SKM15C-15
OUTPUT	DC VOLTAGE		5V			12V			15V		
	CURRENT RANGE		300 ~ 3000mA			125 ~ 1250mA			100 ~ 1000mA		
	RATED POWER		15W								
	RIPPLE & NOISE (max.) Note.2		50mVp-p			60mVp-p			60mVp-p		
	LINE REGULATION Note.3		±0.5%								
	LOAD REGULATION Note.4		±0.5%								
	VOLTAGE ACCURACY		±2.0%								
	SWITCHING FREQUENCY		400KHz typ.								
	EXTERNAL CAPACITANCE LOAD (max.)		1000uF								
	EXTERNAL TRIM Adj. RANGE(Typ.)		±10%								
INPUT	VOLTAGE RANGE		A: 9 ~ 18VDC B: 18 ~ 36VDC C: 36 ~ 75VDC								
	EFFICIENCY (Typ.)		86%	87%	86%	87%	87%	86%	88%	88%	87%
	DC CURRENT	Full load	1500mA	750mA	380mA	1500mA	750mA	380mA	1500mA	750mA	380mA
		No load	80mA	55mA	35mA	35mA	25mA	15mA	35mA	25mA	15mA
	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		115% ~ 150% rated output voltage								
			Protection type : Clamp by diode, recovers automatically after fault condition is removed								
ENVIRONMENT	WORKING TEMP.		-40 ~ +80℃ (Refer to "Derating Curve")								
	WORKING HUMIDITY		20% ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY		-55 ~ +100℃, 10 ~ 95% RH								
	TEMP. COEFFICIENT		±0.03% / ℃ (0 ~ 50℃)								
	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℃ / 70% RH								
	EMC EMISSION		Compliance to BS EN/EN55032 Class A, FCC part 15 Class A, EAC TP TC 020								
	EMC IMMUNITY		Compliance to BS EN/EN61000-4-2,3,4,5,6,8, light industry level, criteria A, EAC TP TC 020								
OTHERS	MTBF		400Khrs min. MIL-HDBK-217F(25℃)								
	DIMENSION		25.4*25.4*9.9 mm or 1"*1"*0.39" inch (L*W*H)								
	WEIGHT		15g								

■ Mechanical Specification

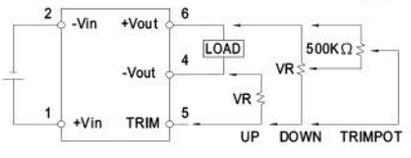
Unit:mm(inch)



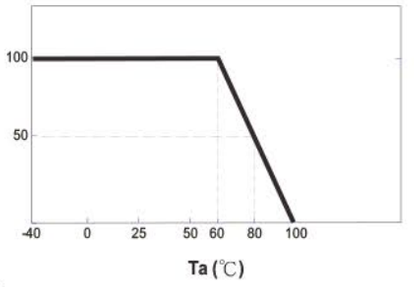
■ Pin Configuration

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

■ External Output Trimming



■ Derating Curve



NOTE

1.All parameters are specified at normal input, rated load, 25℃ 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.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