



■ Features :

- 2:1 wide input range
- 4:1 wide input range(option)
- 1000VDC I/O isolation
- 3000VDC I/O isolation(option)
- Built-in EMI filter
- Protections: Short circuit / Overload
- Cooling by free air convection
- Six-sided shield metal case
- 100% burn-in test
- Low cost / High reliability
- Approvals: FCC / CE
- 2 years warranty

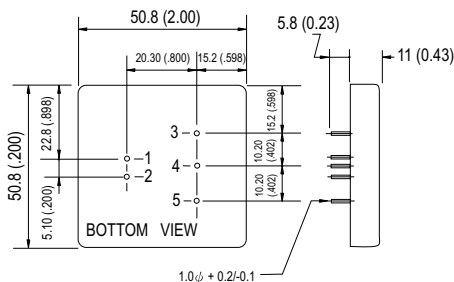


SPECIFICATION

ORDER NO.		SKE15A-05	SKE15B-05	SKE15C-05	SKE15A-12	SKE15B-12	SKE15C-12	SKE15A-15	SKE15B-15	SKE15C-15	SKE15A-24	SKE15B-24	SKE15C-24
OUTPUT	DC VOLTAGE	5V			12V			15V			24V		
	CURRENT RANGE	300 ~ 3000mA			125 ~ 1250mA			100 ~ 1000mA			62.5 ~ 625mA		
	RATED POWER	15W											
	RIPPLE & NOISE (max.) Note.2	50mVp-p			60mVp-p			60mVp-p			80mVp-p		
	LINE REGULATION Note.3	±0.3%											
	LOAD REGULATION Note.4	±0.5%											
	VOLTAGE ACCURACY	±2.0%											
	SWITCHING FREQUENCY	150KHz min.											
INPUT	VOLTAGE RANGE	A: 9 ~ 18VDC B: 18 ~ 36VDC C: 36 ~ 72VDC											
	EFFICIENCY (Typ.)	79%	79%	80%	80%	82%	82%	80%	83%	83%	82%	83%	84%
	DC CURRENT	Full load	A: 1700mA B: 800mA C: 400mA										
		No load	A: 40mA B: 20mA C: 10mA										
	FILTER	Pi network											
	PROTECTION	Fuse recommended											
PROTECTION (Note. 5)	OVER CURRENT	160% ~ 250% 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											
ENVIRONMENT	WORKING TEMP.	-25 ~ +71℃ (Refer to output load derating curve)											
	WORKING HUMIDITY	20% ~ 90% RH non-condensing											
	STORAGE TEMP., HUMIDITY	-25 ~ +105℃, 10 ~ 95% RH											
	TEMP. COEFFICIENT	±0.03% / ℃ (0 ~ 50℃)											
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes											
	WITHSTAND VOLTAGE	I/P-O/P:1KVDC											
SAFETY & EMC	ISOLATION RESISTANCE	I/P-O/P: 100M Ohms / 500VDC / 25℃ / 70% RH											
	EMI CONDUCTION & RADIATION	Compliance to EN55022 Class B, FCC part 15 Class B											
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8, light industry level, criteria A											
OTHERS	MTBF	300Khrs min. MIL-HDBK-217F(25℃)											
	DIMENSION	50.8*50.8*11.0 mm or 2**2**0.43" inch (L*W*H)											
	WEIGHT	65g											

■ Mechanical Specification

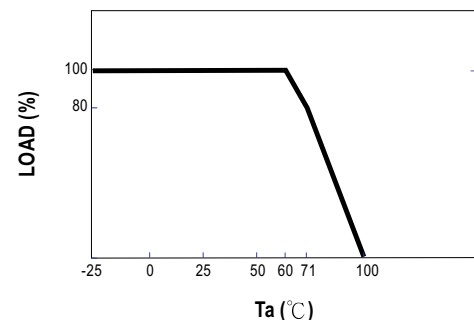
Unit:mm(inch)



■ Pin Configuration

Pin No.	Output
1	+Vin
2	-Vin
3	+Vout
4	No Pin
5	-Vout

■ 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.Please prevent the converter from operating in overload or short circuit condition for more than 30 seconds.

Quality Engineering Test Report

SERIES: SKE15B 15W DC-DC SINGLE OUTPUT CONVERTER

SAMPLE:

B: SKE15B-12 +12V / 125~1250mA
D: SKE15B-24 +24V / 62.5~625mA

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
1	DC INPUT VOLTAGE RANGE	I/P:TESTING SPEC: 18~36VDC O/P:FULL LOAD	B:13.4~36VDC	P
2	LINE REGULATION	I/P:18~36VDC SPEC: $\pm 0.3\%$ O/P:FULL LOAD	B: -0.1% ~ +0% D: -0% ~ +0%	P
3	LOAD REGULATION	I/P:24VDC SPEC: $\pm 0.5\%$ O/P:MIN. TO FULL LOAD	B: -0.1% ~ +0.1% D: -0.1% ~ +0%	P
4	OUTPUT VOLTAGE TOLERANCE	I/P:18~36VDC SPEC: NONE O/P:MIN. TO FULL LOAD	B: -0.1% ~ +0.1% D: -0.1% ~ +0%	P
5	RIPPLE&NOISE	I/P:24VDC SPEC: B:60mV O/P:FULL LOAD D:80mV	B: 13mV D: 25mV	P
6	DC INPUT CURRENT	I/P:24VDC SPEC: 0.8A O/P:FULL LOAD	B:0.74A	P
7	O/P VOLTAGE ACCURACY	I/P:24VDC SPEC: $\pm 2\%$ O/P:MIN. LOAD	B: -0.5%(11.94V) D: -0.3%(23.93V)	P
8	EFFICIENCY	I/P:24VDC SPEC: B:82% O/P:FULL LOAD D:83%	B: 83.8% D: 84.6%	P
9	OVER LOAD PROTECTION	I/P:24VDC SPEC: 160~250% O/P:TESTING	B: 198% D: 193%	P
10	INSULATION RESISTANCE	SPEC: I/P--O/P: 500VDC/100M Ohms MIN.	B: I/P--O/P >100M Ohms	P
11	DIELECTRIC / WITHSTAND VOLTAGE	SPEC: I/P--O/P: 1000VDC/ 1 min (10mA CUT-OFF)	B: I/P--O/P:<0.002mA	P

[NEXT](#)

NO	TEST ITEM	TEST CONDITION / SPECIFICATION		RESULT	VERDICT							
12	BURN-IN TEST	I/P:24VDC TA:28°C O/P:FULL LOAD BURN-IN DURATION : 15 hrs		B: NO BREAK D: NO BREAK	P							
13	TEMPERATURE RISE TEST T rise OF PARTS	B: I/P :24VDC O/P :FULL LOAD AFTER 15 hrs BURN-IN TA:28°C			P							
			<table><tr><td>POSITION</td><td>SAMPLE</td><td>TEMP</td><td>Trise</td></tr><tr><td>CASE</td><td>SKE15B-12</td><td>48.4°C</td><td>20.4°C</td></tr></table>	POSITION		SAMPLE	TEMP	Trise	CASE	SKE15B-12	48.4°C	20.4°C
POSITION	SAMPLE	TEMP	Trise									
CASE	SKE15B-12	48.4°C	20.4°C									
14	CONSTRUCTION INSPECTION (FOR QC INSPECTION REFERENCE ONLY)	1. PACKING : 軌道型塑膠包裝 2. MARKING : MODEL 3. MECHANICAL : MODULAR TYPE, PIN :1.0Øx5mm										
DATE	SAMPLE	TEST RESULT		TEST	APPROVAL							
9.5.2002	SKE15B-12 SKE15B-24	PASS		T.K.CHENG	MAX LIN							

[PREVIOUS](#)