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Jameco Part Number 155716



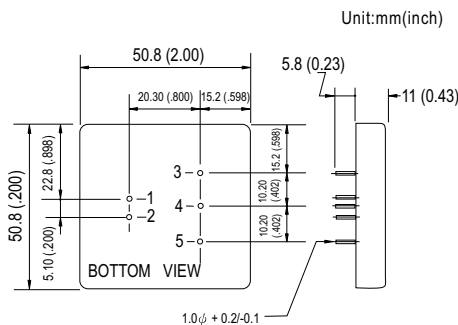
- Features :
 - 2:1 wide input range
 - 4:1 wide input range(option)
 - 1000VDC I/O isolation
 - 3000VDC I/O isolation(option)
 - Input Pi network filter
 - Protections: Short circuit / Overload
 - Cooling by free air convection
 - Six-sided shield metal case
 - 100% burn-in test
 - Low cost / High reliability
 - Approvals: FCC / CE
 - 1 year 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 (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°C (Refer to output load derating curve)											
	WORKING HUMIDITY	20% ~ 90% RH non-condensing											
	STORAGE TEMP., HUMIDITY	-25 ~ +105°C, 10 ~ 95% RH											
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 50°C)											
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes											
SAFETY & EMC	WITHSTAND VOLTAGE	I/P-O/P:1KVDC											
	ISOLATION RESISTANCE	I/P-O/P: 100M Ohms / 500VDC / 25°C / 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°C)											
	DIMENSION	50.8*50.8*11.0 mm or 2"*2"*0.43" inch (L*W*H)											
	WEIGHT	65g											

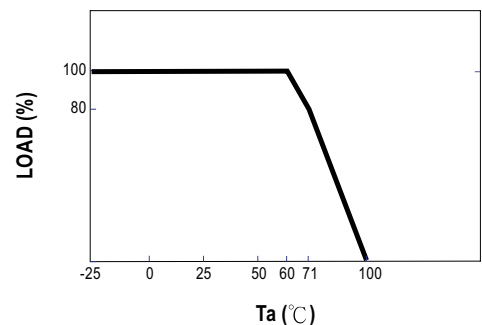
Mechanical Specification



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: SKE15A 15W DC-DC SINGLE OUTPUT CONVERTER

SAMPLE: **A: SKE15A-05 +5V / 300~3000mA**
 B: SKE15A-12 +12V / 125~1250mA
 D: SKE15A-24 +24V / 62.5~625mA

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
1	DC INPUT VOLTAGE RANGE	I/P:TESTING SPEC: 9~18VDC O/P:FULL LOAD	B:8.4~18VDC	P
2	LINE REGULATION	I/P:9~18VDC SPEC: $\pm 0.3\%$ O/P:FULL LOAD	A: -0% ~ +0% B: -0% ~ +0% D: -0% ~ +0%	P
3	LOAD REGULATION	I/P:12VDC SPEC: $\pm 0.5\%$ O/P:MIN. TO FULL LOAD	A: -0.2% ~ +0.2% B: -0% ~ +0% D: -0% ~ +0.1%	P
4	OUTPUT VOLTAGE TOLERANCE	I/P:9~18VDC SPEC: NONE O/P:MIN. TO FULL LOAD	A: -0.2% ~ +0.2% B: -0% ~ +0% D: -0.1% ~ +0.1%	P
5	RIPPLE&NOISE	I/P:12VDC SPEC: A:50mV B:60mV O/P:FULL LOAD D:80mV	A: 15mV B: 13mV D: 20mV	P
6	DC INPUT CURRENT	I/P:12VDC SPEC: 1.7A O/P:FULL LOAD	B:1.56A	P
7	O/P VOLTAGE ACCURACY	I/P:12VDC SPEC: $\pm 2\%$ O/P:MIN. LOAD	A: -0.8%(4.96V) B: +0.2%(12.02V) D: -0.1%(23.98V)	P
8	EFFICIENCY	I/P:12VDC SPEC: A:79% O/P:FULL LOAD B:80% D:82%	A: 78.6% B: 80.2% D: 81.8%	P
9	OVER LOAD PROTECTION	I/P:12VDC SPEC: 160~250% O/P:TESTING	A: 180% B: 179% D: 181%	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:12VDC TA:28°C O/P:FULL LOAD BURN-IN DURATION : 15 hrs	A: NO BREAK B: NO BREAK D: NO BREAK	P								
13	TEMPERATURE RISE TEST T rise OF PARTS	B: I/P :12VDC O/P :FULL LOAD AFTER 15 hrs BURN-IN TA:28°C	<table border="1"> <thead> <tr> <th>POSITION</th> <th>SAMPLE</th> <th>TEMP</th> <th>Trise</th> </tr> </thead> <tbody> <tr> <td>CASE</td> <td>SKE15A-12</td> <td>49.8°C</td> <td>21.8°C</td> </tr> </tbody> </table>	POSITION	SAMPLE	TEMP	Trise	CASE	SKE15A-12	49.8°C	21.8°C	P
POSITION	SAMPLE	TEMP	Trise									
CASE	SKE15A-12	49.8°C	21.8°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	SKE15A-05 SKE15A-12 SKE15A-24	PASS	T.K.CHENG	MAX LIN								

[PREVIOUS](#)