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Jameco Part Number 1953161



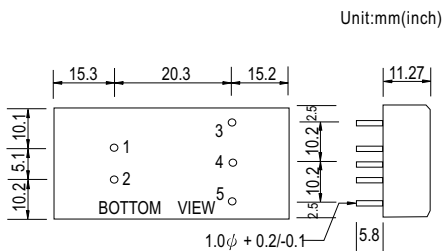
- Features :
 - 2:1 wide input range
 - 4:1 wide input range(option)
 - 1000VDC I/O isolation
 - 3000VDC I/O isolation(option)
 - Input Pi network filter
 - Protections: Short circuit / Overload
 - Cooling by free air convection
 - Six-sided shield metal case
 - 100% burn-in test
 - Low cost / High reliability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



SPECIFICATION

ORDER NO.		SKA15A-033	SKA15B-033	SKA15C-033	SKA15A-05	SKA15B-05	SKA15C-05	SKA15A-12	SKA15B-12	SKA15C-12	SKA15A-15	SKA15B-15	SKA15C-15
OUTPUT	DC VOLTAGE	3.3V			5V			12V			15V		
	CURRENT RANGE	300 ~ 3000mA			300 ~ 3000mA			125 ~ 1250mA			100 ~ 1000mA		
	RATED POWER	9.9W			15W								
	RIPPLE & NOISE (max.) Note.2	50mVp-p			50mVp-p			60mVp-p			60mVp-p		
	LINE REGULATION Note.3	±0.2%											
	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.)	76%	76%	76%	78%	78%	80%	82%	80%	82%	82%	80%	82%
	DC CURRENT	Full load A: 1700mA B: 800mA C: 400mA No load A: 20mA B: 30mA C: 15mA											
	FILTER	Pi network											
PROTECTION (Note. 5)	OVER CURRENT	110% ~ 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*25.4*11.27 mm or 2**1**0.44" inch (L*W*H)											
	WEIGHT	60g											

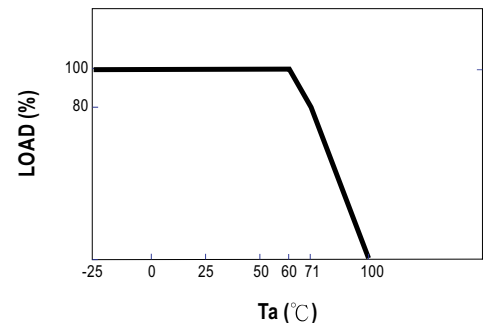
■ Mechanical Specification



■ Pin Configuration

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

■ Derating Curve



NOTE

- All parameters are specified at normal input, rated load, 25°C 70% RH Ambient.
- Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
- Line regulation is measured from low line to high line at rated load.
- Load regulation is measured from 10% to 100% rated load.
- Please prevent the converter from operating in overload or short circuit condition for more than 30 seconds.

Model : SKA15A-12 15W
+12V / 1.25A

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OUTPUT VOLTAGE ACCURACY	-2%~+2%	I/P: 12VDC O/P:50% LOAD Ta:25°C	0.45%	P
2	RIPPLE & NOISE	60mVp-p	I/P:12VDC O/P:FULL LOAD Ta:25°C	35mVp-p	P
3	LINE REGULATION	-0.2%~+0.2%	I/P:9VDC ~18VDC O/P:FULL LOAD Ta:25°C	-0.03%~+0.01%	P
4	LOAD REGULATION	-0.5%~+0.5%	I/P:12VDC O/P: MIN ~FULL LOAD Ta:25°C	-0.7%~+0.7%	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	INPUT VOLTAGE RANGE	9VDC-18VDC	I/P:TESTING O/P:FULL LOAD Ta:25°C	7.0V-18Vdc	P
2	EFFICIENCY	82% (Typ)	I/P:12VDC O/P:FULL LOAD Ta:25°C	84.4%	P
3	INPUT CURRENT	1700mA FULL LOAD (Max.) 20mA NO LOAD (Typ.)	I/P:12VDC O/P:TEST Ta:25°C	1.478A / FULL LOAD 15.2mA / NO LOAD	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	110%~250%(Typ)	I/P:12VDC O/P:TESTING Ta:25°C	148% HICCUP MODE AUTO-RECOVER	P
2	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P:18VDC O/P:FULL LOAD Ta:25°C	NO DAMAGE HICCUP MODE AUTO-RECOVER	P

ENVIRONMENT TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT										
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 4HRS I/P:12VDC O/P: FULL LOAD Ta= 25.4°C 2. ROOM AMBIENT BURN-IN : 4HRS I/P:12VDC O/P: FULL LOAD Ta= 60.1°C 3. ROOM AMBIENT BURN-IN : 4HRS I/P:12VDC O/P: 80% LOAD Ta= 66.6°C			P										
		<table border="1"> <thead> <tr> <th>Position</th> <th>P/N</th> <th>1</th> <th>2</th> <th>3</th> </tr> </thead> <tbody> <tr> <td>CASE</td> <td>CENTER</td> <td>47.4°C</td> <td>82.4°C</td> <td>82.9°C</td> </tr> </tbody> </table>				Position	P/N	1	2	3	CASE	CENTER	47.4°C	82.4°C	82.9°C
Position	P/N	1	2	3											
CASE	CENTER	47.4°C	82.4°C	82.9°C											
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 3 HOURS	I/P:12VDC O/P: 100% LOAD Ta= -40°C	TEST : OK	P										

SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:1000 VDC/min	I/P-O/P:1000 VDC/min Ta:25°C	I/P-O/P: 0.02mA NO DAMAGE	P
2	ISOLATION RESISTANCE	I/P-O/P:500VDC>100MΩ	I/P-O/P:500 VDC Ta:25°C	I/P-O/P>100MΩ NO DAMAGE	P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2008.1.9	STOCK	PASS	PETER	T.K.CHENG