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Jameco Part Number 217024



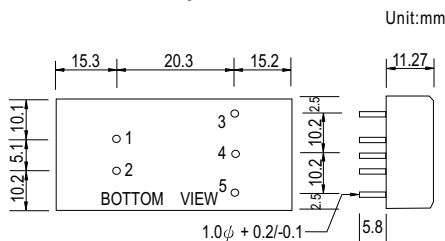
- Features :
- 2:1 wide input range
 - 4:1 wide input range(option)
 - 1000VDC I/O isolation
 - 3000VDC I/O isolation(option)
 - Input Pi network filter
 - Protections: Short circuit / Overload
 - Cooling by free air convection
 - Six-sided shield metal case
 - 100% burn-in test
 - Low cost / High reliability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



SPECIFICATION

ORDER NO.	SKE10A-05	SKE10B-05	SKE10C-05	SKE10A-12	SKE10B-12	SKE10C-12	SKE10A-15	SKE10B-15	SKE10C-15	SKE10A-24	SKE10B-24	SKE10C-24	
OUTPUT	DC VOLTAGE	5V			12V			15V			24V		
	CURRENT RANGE	200 ~ 2000mA			84 ~ 840mA			66.6 ~ 666mA			42 ~ 420mA		
	RATED POWER	10W											
	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	200KHz min.												
INPUT	VOLTAGE RANGE	A: 9 ~ 18VDC B: 18 ~ 36VDC C: 36 ~ 72VDC											
	EFFICIENCY (Typ.)	78%	79%	80%	79%	81%	81%	80%	82%	82%	81%	82%	83%
	DC CURRENT	Full load		A: 1100mA B: 530mA C: 270mA		No load		A: 28mA B: 16mA C: 8mA					
	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	500khrs min. MIL-HDBK-217F(25°C)											
	DIMENSION	50.8*25.4*11.2mm or 2**1**0.44" inch (L*W*H)											
	WEIGHT	32g											

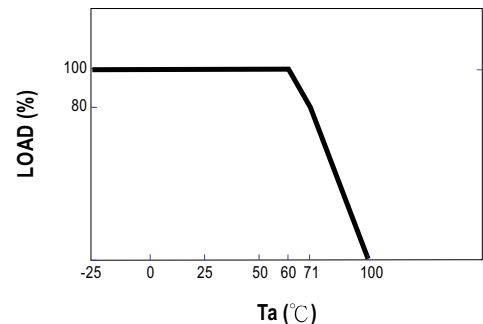
■ Mechanical Specification



■ 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.

Model : SKE10B-12 10W DC-DC Single Output Converter
 V1 : 12V / 84~840mA

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE ACCURACY	-2%~+2% (Max)	I/P:24VDC O/P:50% LOAD Ta:25°C	+0.3%	P
2	RIPPLE & NOISE	60mVp-p (Max)	I/P:24VDC O/P:FULL LOAD Ta:25°C	18mV	P
3	LINE REGULATION	-0.3%~+0.3% (Max)	I/P:18VDC~36VDC O/P:FULL LOAD Ta:25°C	-0%~+0%	P
4	LOAD REGULATION	-0.5%~+0.5% (Max)	I/P:24VDC O/P:MIN~FULL LOAD Ta:25°C	-0.1%~+0%	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	DC VOLTAGE RANGE	18VDC~36VDC (Typ)	I/P:TESTING O/P:FULL LOAD Ta:25°C	13.2V~36V	P
2	EFFICIENCY	81% (Typ)	I/P:24VDC O/P:FULL LOAD Ta:25°C	83.2%	P
3	DC CURRENT	530mA (Max)	I/P:24VDC O/P:FULL LOAD Ta:25°C	506mA	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	160%~250% (Max)	I/P:24VDC O/P:TESTING Ta:25°C	216% Hiccup Mode Reset Auto Recovery	P
2	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P:24VDC O/P:FULL LOAD Ta:25°C	NO DAMAGE Hiccup Mode Reset Auto Recovery	P

ENVIRONMENT TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 12HRS I/P:24VDC O/P:FULL LOAD Ta=25°C			P
		Position	P/N	TEMP Ta=25°C	
		CASE	SKE10B-12	45.5°C	

SAFETY TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	WITHSTAND VOLTAGE	I/P-O/P:1KVDC/min	I/P-O/P:1KVDC/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:500VDC Ta:25°C	I/P-O/P:30GΩ NO DAMAGE	P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2003.9.17	SKE10B-12	PASS	FRANK.CHEN	MAX LIN