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Jameco Part Number 1954092



■ 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

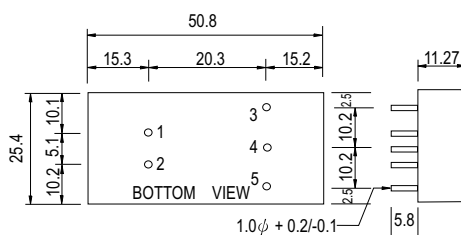


SPECIFICATION

ORDER NO.		DKA15A-05	DKA15B-05	DKA15C-05	DKA15A-12	DKA15B-12	DKA15C-12	DKA15A-15	DKA15B-15	DKA15C-15
OUTPUT	DC VOLTAGE	±5V			±12V			±15V		
	CURRENT RANGE	±150 ~ ±1500mA			±62.5 ~ ±625mA			±50 ~ ±500mA		
	RATED POWER	15W								
	RIPPLE & NOISE (max.) Note.2	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.)	80%	80%	82%	83%	80%	82%	83%	80%	82%
	DC CURRENT	Full load	A: 1600mA B: 800mA C: 400mA							
		No load	A: 30mA B: 30mA C: 15mA							
	FILTER	Pi network								
	PROTECTION	Fuse recommended								
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℃ (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% / °C (0 ~ 50℃)								
	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℃/ 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*25.4*11.27mm or 2"*1"*0.44" inch (L*W*H)								
	WEIGHT	32g								

■ Mechanical Specification

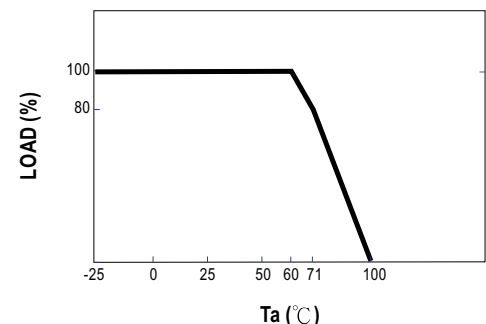
Unit: mm (inch)



■ Pin Configuration

Pin No.	Output
1	+Vin
2	-Vin
3	+Vout
4	COM
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 : DKA15A-15 15W
V1 : +15V / 50~500mA
V2 : - 15V / 50~500mA

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE ACCURACY	V1:-2%~+2% (Max) V2:-2%~+2% (Max)	I/P:12VDC O/P:50% LOAD Ta:25°C	V1:-0.6% V2:-0.78%	P
2	RIPPLE & NOISE	V1:60mVp-p (Max) V2:60mVp-p (Max)	I/P:12VDC O/P:FULL LOAD Ta:25°C	V1:34mV V2:38mV	P
3	LINE REGULATION	V1:-0.2%~+0.2% (Max) V2:-0.2%~+0.2% (Max)	I/P:9VDC~18VDC O/P:FULL LOAD Ta:25°C	V1:-0.04%~+0.04% V2:-0.04%~+0.02%	P
4	LOAD REGULATION	V1:-0.5%~+0.5% (Max) V2:-0.5%~+0.5% (Max)	I/P:12VDC O/P:MIN~FULL LOAD Ta:25°C	V1:-0.03%~+0.03% V2:-0.06%~+0.06%	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	DC VOLTAGE RANGE	9VDC~18VDC (Typ)	I/P:TESTING O/P:FULL LOAD Ta:25°C	7.8V~18V	P
2	EFFICIENCY	83% (Typ)	I/P:12VDC O/P:FULL LOAD Ta:25°C	81.6%	P
3	DC CURRENT	30mA (Typ) NO LOAD 1600mA (Typ) FULL LOAD	I/P:12VDC O/P:NO LOAD ~ FULL LOAD Ta:25°C	33.2mA / NO LOAD 1525mA / FULL LOAD	P

PROTECTION FUNCTION TEST

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	110%~250% (Max)	I/P:12VDC O/P:TESTING Ta:25°C	118% Hiccup Mode Reset Auto Recovery	P
2	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P:12VDC 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 : 4HRS I/P:12VDC O/P:FULL LOAD Ta=26.9℃ 2. HIGH AMBIENT BURN-IN : 3HRS I/P:12VDC O/P:FULL LOAD Ta=63.7℃ <table><tr><td>Position</td><td>P/N</td><td>1</td><td>2</td></tr><tr><td>CASE</td><td>CENTER</td><td>57.9℃</td><td>87.7℃</td></tr></table>			Position	P/N	1	2	CASE	CENTER	57.9℃	87.7℃	P
Position	P/N	1	2										
CASE	CENTER	57.9℃	87.7℃										
2	LOW TEMPERATURE TURN ON TEST	TURN ON AFTER 3 HOURS	I/P:12VDC O/P: 100% LOAD Ta= -25℃	TEST : OK	P								

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℃	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℃	I/P-O/P:>100MΩ NO DAMAGE	P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2008.1.10	STOCK	PASS	PETER	T.K.CHENG