



Features :

- 2:1 wide input range
- 4:1 wide input range(optionl)
- 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

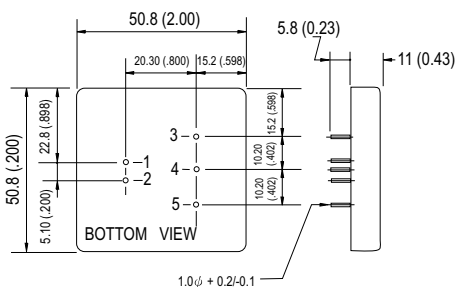


SPECIFICATION

ORDER NO.		DKE15A-05	DKE15B-05	DKE15C-05	DKE15A-12	DKE15B-12	DKE15C-12	DKE15A-15	DKE15B-15	DKE15C-15	DKE15A-24	DKE15B-24	DKE15C-24
OUTPUT	DC VOLTAGE	±5V			±12V			±15V			±24V		
	CURRENT RANGE	±150 ~ ±1500mA			±62.5 ~ ±625mA			±50 ~ ±500mA			±31.3 ~ ±313mA		
	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.)	81%	83%	79%	82%	83%	82%	82%	83%	82%	82%	84%	85%
	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											
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*50.8*11.0mm or 2**2**0.43" inch (L*W*H)											
	WEIGHT	65g											

Mechanical Specification

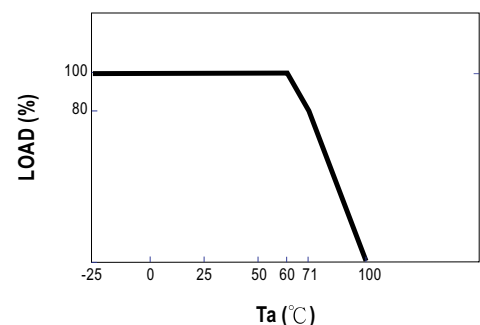
Unit: mm (inch)



Pin Configuration

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

Quality Engineering Test Report

SERIES: DKE15B 15W DC-DC DUAL OUTPUT CONVERTER

SAMPLE: A:DKE15B-05

V1: +5V / 1.5A

V2: -5V / 1.5A

B:DKE15B-12

V1:+12V / 0.625A

V2:-12V / 0.625A

C:DKE15B-15

V1:+15V / 0.5A

V2:-15V / 0.5A

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
1	DC INPUT VOLTAGE RANGE	I/P : TESTING O/P : FULL LOAD SPEC : 18 ~ 36VDC	A: ~ 36VDC	P
2	LINE REGULATION	I/P : 18 ~ 36VDC O/P : FULL LOAD SPEC : $\pm 0.3\%$	A: V1: -% ~ +% V2: -% ~ +% B: V1: -0.1% ~ +0.1% V2: -0.1% ~ +0% C: V1: -% ~ +% V2: -% ~ +%	P
3	LOAD REGULATION	I/P : 24VDC O/P : MIN. TO FULL LOAD SPEC : $\pm 2\%$	A: V1: -% ~ +% V2: -% ~ +% B: V1: -0.1% ~ +0.1% V2: -0.1% ~ +0% C: V1: -% ~ +% V2: -% ~ +%	P
4	OUTPUT VOLTAGE TOLERANCE	I/P : 18 ~ 36VDC O/P : MIN. TO FULL LOAD SPEC : $\pm 2\%$	A: V1: -% ~ +% V2: -% ~ +% B: V1: -3.0% ~ +2.4% V2: -2.9% ~ +2.4% C: V1: -% ~ +% V2: -% ~ +%	P
5	RIPPLE & NOISE	I/P : 24VDC O/P : FULL LOAD SPEC : A:50mV B:60mV C:60mV	A: V1: mV V2: mV B: V1: 10mV V2: 20mV C: V1: mV V2: mV	P
6	DC INPUT CURRENT	I/P : 24VDC O/P : FULL LOAD SPEC : NONE	A:0.765A	P
7	O/P RATED VOLTAGE	I/P : 24VDC O/P : MIN. LOAD SPEC : NONE	A: V1: V V2: V B: V1: +0.9% V2: +0.9% C: V1: V V2: V	P
8	SET UP TIME	I/P : 24VDC O/P : FULL LOAD SPEC : NONE	A:mS	P
9	HOLD UP TIME	I/P : 24VDC O/P : FULL LOAD SPEC : NONE	A:mS	P
10	EFFICIENCY	I/P : 24VDC O/P : FULL LOAD SPEC : 76% TYP	A: % B: 83.0% C: %	P
11	OVER LOAD PROTECTION	I/P : 24VDC O/P : TESTING SPEC : NONE	A: % B: 235% C: %	P
12	INSULATION RESISTANCE	SPEC : I/P - O/P : 500VDC/100M Ohms MIN.	A: I/P - O/P > 100M Ohms	P
	DIELECTRIC /	SPEC : I/P - O/P : 1000VDC/ 1 min (10mA CUT-OFF)		

13	WITHSTAND VOLTAGE		A: I/P - O/P : < 0.02mA	P
14	BURN-IN TEST	I/P:24VDC TA:23 °C	O/P:FULL LOAD BURN-IN DURATION : 4 hrs	A: NO BREAK B: NO BREAK C: NO BREAK P

NEXT

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT							
15	TEMPERATURE RISE TEST Trise OF PARTS	B:I/P : 24VDC AFTER 4 hrs BURN-IN O/P : FULL LOAD TA : 22.0 °C <table><tr><td>POSITION</td><td>SAMPLE</td><td>TEMP</td><td>Trise</td></tr><tr><td>CASE</td><td>DKE15B-12</td><td>°C</td><td>°C</td></tr></table>	POSITION	SAMPLE	TEMP	Trise	CASE	DKE15B-12	°C	°C	P
POSITION	SAMPLE	TEMP	Trise								
CASE	DKE15B-12	°C	°C								
16	CONSTRUCTION INSPECTION (FOR QC INSPECTION REFERENCE ONLY)	1. PACKING : 軌道型塑膠包裝 2. MARKING : MODEL LABELx1 3. MECHANICAL : SIX-SIDE SHIELDED CASE, PIN OUTPUT:1.0Φx8.3mm 3. DIMENSION : 2" * 2" * 0.43"									
DATE	SAMPLE	TEST RESULT	TEST	APPROVAL							
2001.1.11	DKE15B-12	PASS	T.K.CHENG	MAX LIN							