25~30W DC-DC Dual Output Converter

DKA30 series



Features :

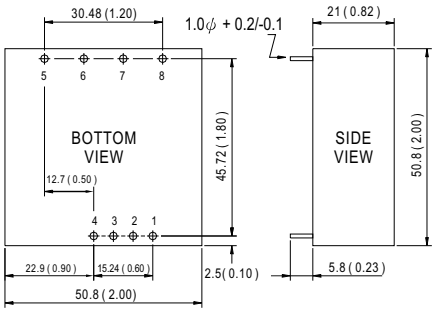
- 2:1 wide input range
- 4:1 wide input range(option)
- 1000VDC I/O isolation
- Built-in EMI filter
- Trimming output(±10%)
- Remote ON-OFF control
- Protections: Short circuit / Overload
- Cooling by free air convection
- Six-sided shield metal case
- Epoxy encapsulated
- 100% burn-in test
- Approvals: FCC / CE
- 2 years warranty

SPECIFICATION

ORDER NO.		DKA30A-05	DKA30B-05	DKA30C-05	DKA30A-12	DKA30B-12	DKA30C-12	DKA30A-15	DKA30B-15	DKA30C-15
OUTPUT	DC VOLTAGE	±5V			±12V			±15V		
	CURRENT RANGE	±250 ~ ±2500mA			±125 ~ ±1250mA			±100 ~ ±1000mA		
	RATED POWER	25W			30W			30W		
	RIPPLE & NOISE (max.) Note.2	100mVp-p								
	LINE REGULATION Note.3	±0.5%								
	LOAD REGULATION Note.4	±0.5%								
	VOLTAGE ACCURACY	±2.0%								
	SWITCHING FREQUENCY	100KHz min.								
	EXTERNAL TRIM Adj. RANGE	±10%								
INPUT	VOLTAGE RANGE	A: 9 ~ 18VDC B: 18 ~ 36VDC C: 36 ~ 72VDC								
	EFFICIENCY (Typ.)	80%	80%	80%	80%	83%	81%	80%	83%	81%
	DC CURRENT	Full load	A: 3.2A	B: 1.5A	C: 0.77A					
		No load	A: 40mA	B: 20mA	C: 10mA					
	FILTER	Pi network								
	PROTECTION	Fuse recommended								
PROTECTION (Note. 5)	OVERLOAD	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.	-40 ~ +85℃ (Refer to output load derating curve)								
	WORKING HUMIDITY	20% ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-40 ~ +105℃, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03% / ℃ (0 ~ 50℃)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1 cycle, 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	REMOTE CONTROL	Power on: R.C ~-Vin > 4.5~5.5VDC or open, Power off : R.C~ -Vin <0.8VDC or short								
	MTBF	100Khrs min. MIL-HDBK-217F (25℃)								
	DIMENSION	50.8*50.8*21.0mm or 2"*2"*0.82" inch (L*W*H)								
	WEIGHT	110g								

Mechanical Specification

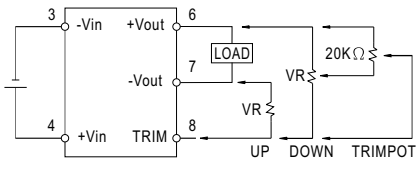
Unit: mm (inch)



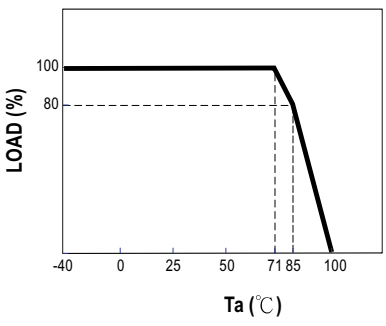
Pin Configuration

Pin No.	Output	Pin No.	Output
1	R.C	5	+Vout
2	No Pin	6	COM
3	-Vin	7	-Vout
4	+Vin	8	TRIM

External Output Trimming



Derating Curve



NOTE

1. All parameters are specified at normal input, rated load, 25℃ 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.