15W DC-DC Regulated Dual Output Converter

DKA15 series

Features :

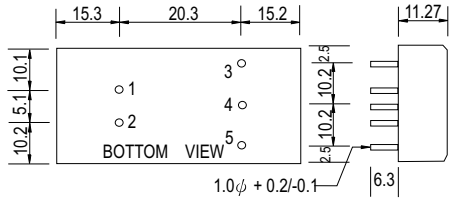
- 2:1 wide input range
- 1000VDC I/O isolation
- 3000VDC I/O isolation (Optional)
- Input Pi network filter
- Protections: Short circuit/ Over load
- Free air convection
- Six-sided shield metal case
- High reliability/ Low cost
- 100% burn-in test
- 1 year warranty

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 (Note. 5)	OVER CURRENT	110%~160% 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								
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	60g								

Mechanical Specification

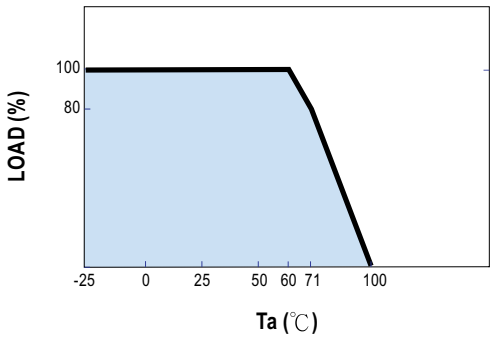
Unit: mm (inch)



Pin Configuration

Pin no.	Output Dual
1	+Vin
2	-Vin
3	+Vout
4	COMMON
5	-Vout

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.