



25W DC-DC Triple Output Converter

TKA30 series



Features :

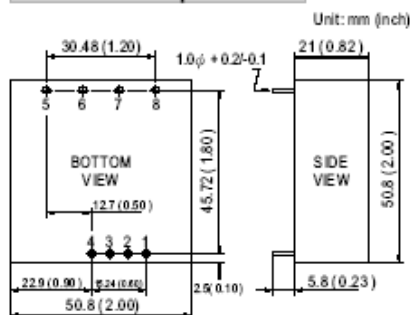
- 2:1 wide input range
- 4:1 wide input range(option)
- 1000VDC I/O isolation
- Built-in EMI filter
- Remote ON-OFF control
- Protections: Short circuit / Overload
- Cooling by free air convection
- Six-sided shield metal case
- Epoxy encapsulated
- 100% burn-in test
- Approvals: FCC / CE
- 2 years warranty



SPECIFICATION

ORDER NO.	TKA30A-B	TKA30B-B	TKA30C-B	TKA30A-C	TKA30B-C	TKA30C-C	
OUTPUT	DC VOLTAGE	+5V	±12V		+5V	±15V	
	CURRENT RANGE	350 ~ 3500mA	±31 ~ ±310mA		350 ~ 3500mA	±25 ~ ±250mA	
	RATED POWER	25W					
	RIPPLE & NOISE (max.) Note.2	100mVp-p					
	LINE REGULATION Note.3	±0.5%	±1.0%	±1.0%	±0.5%	±1.0%	±1.0%
	LOAD REGULATION Note.4	+5V: ±2.0%, ±V _L : ±5.0%					
	VOLTAGE ACCURACY	+5V: ±2.0%, ±V _L : ±5.0%					
SWITCHING FREQUENCY	100KHz min.						
INPUT	VOLTAGE RANGE	A: 9 ~ 18VDC B: 18~36VDC C: 36~72VDC					
	EFFICIENCY (Typ.)	80%	82%	82%	80%	82%	82%
	DC CURRENT	Full load A: 2.61A B: 1.27A C: 0.64A No load A: 40mA B: 18mA 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.	-25 ~ +85°C (Refer to output load derating curve)					
	WORKING HUMIDITY	20% ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +105°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 50°C)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes					
SAFETY & EMC	WITHSTAND VOLTAGE	VP-O/P: 1KVDC					
	ISOLATION RESISTANCE	VP-O/P: 100M Ohms / 500VDC / 25°C / 70% RH					
	EMI CONDUCTION & RADIATION	Compliance to EN55022 Class B, FCC part 15 Class B					
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8, light industry level, criteria A					
	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°C)					
	DIMENSION	50.8*50.8*21.0mm or 2**2**0.82" inch (L*W*H)					
WEIGHT	110g						

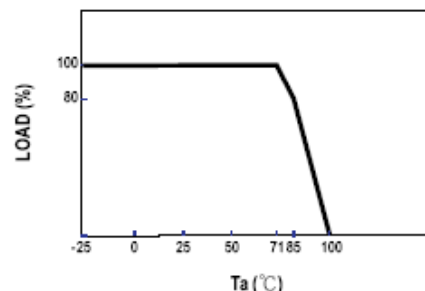
Mechanical Specification



Pin Configuration

Pin No.	Output
1	R.C
2	No Pin
3	-Vin
4	+Vin
5	+Vout
6	+5V
7	COM
8	-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 20% to 100% rated load.
- 5.Please prevent the converter from operating in overload or short circuit condition for more than 30 seconds.