



#### Features:

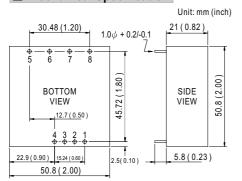
- 2:1 wide input range
- 4:1 wide input range(option)
- 1000VDC I/O isolation
- · Built-in EMI filter
- · Remote ON-OFF control
- · Protections: Short circuit / Overload
- Cooling by free air convection
- · Six-sided shield metal case
- · Epoxy encapsulated
- 100% burn-in test
- Approvals: FCC / CE
-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

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# **SPECIFICATION**

| ORDER NO.               |                              | TKA30A-B  | TKA30B-B                | TKA30C-B | TKA30A-C | TKA30B-C     | TKA30C-C |  |
|-------------------------|------------------------------|---|-------------------------|----------|----------|--------------|----------|--|
| OUTPUT                  | DC VOLTAGE                   | +5V   | ±12V                    |          | +5V      | ±15V         |          |  |
|                         | CURRENT RANGE                | 700 ~ 3500mA  | ) ~ 3500mA ±62 ~ ±310mA |          |          | ±50 ~ ±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 <sub>1</sub> : ±5.0%   |                         |          |          |              |          |  |
|                         | VOLTAGE ACCURACY             | +5V: ±2.0%, ±V <sub>1</sub> : ±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%   |                         |          |          | 82%          |          |  |
|                         | DC CURRENT                   | Full load A: 2.61A B: 1.27A C: 0.64A  |                         |          |          |              |          |  |
|                         |                              | No load A: 40mA   | B: 18mA C: 10m/         | 4        |          |              |          |  |
|                         | FILTER                       | Pi network  |                         |          |          |              |          |  |
|                         | PROTECTION                   | Fuse recommended  |                         |          |          |              |          |  |
| PROTECTION<br>(Note. 5) | OVERLOAD                     | 110 ~ 250% rated output power   |                         |          |          |              |          |  |
|                         | 0121120715                   | 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°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 &<br>EMC         | WITHSTAND VOLTAGE            | I/P-O/P:1KVDC   |                         |          |          |              |          |  |
|                         | ISOLATION RESISTANCE         | I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH   |                         |          |          |              |          |  |
|                         |                              | 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°C)  |                         |          |          |              |          |  |
|                         | DIMENSION                    | 50.8*50.8*21.0mm or 2"*2"*0.82" inch (L*W*H)  |                         |          |          |              |          |  |
|                         | WEIGHT                       | 110g  |                         |          |          |              |          |  |

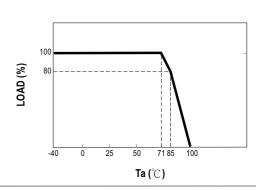
## **■** Mechanical Specification



## ■ Pin Configuration

| Pin No. | Output       |  |  |  |
|---------|--------------|--|--|--|
| 1       | R.C          |  |  |  |
| 2       | No Pin       |  |  |  |
| 3       | -Vin         |  |  |  |
| 4       | +Vin         |  |  |  |
| 5       | +Vout        |  |  |  |
| 6       | +5V          |  |  |  |
| 7       | COM<br>-Vout |  |  |  |
| 8       |              |  |  |  |

## ■ 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.