



15W DC-DC Regulated Dual Output Converter

DKA15 series



■ Features :

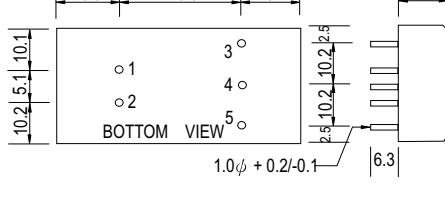
- 2:1 wide input range
- 1000VDC I/O isolation
- 3000VDC I/O isolation (Optional)
- Input Pi network filter
- Protections: Short circuit/ Over load
- Free air convection
- Six-sided shield metal case
- High reliability/ Low cost
- 100% burn-in test
- 1 year warranty

SPECIFICATION

| ORDER NO. | | DKA15A-05 | DKA15B-05 | DKA15C-05 | DKA15A-12 | DKA15B-12 | DKA15C-12 | DKA15A-15 | DKA15B-15 | DKA15C-15 |
|-------------------------|------------------------------|--|-----------|-----------|---------------------------|-----------|-----------|--|-----------|-----------|
| OUTPUT | DC VOLTAGE | $\pm 5V$ | | | $\pm 12V$ | | | $\pm 15V$ | | |
| | CURRENT RANGE | $\pm 150 \sim \pm 1500mA$ | | | $\pm 62.5 \sim \pm 625mA$ | | | $\pm 50 \sim \pm 500mA$ | | |
| | RATED POWER | 15W | | | | | | | | |
| | RIPPLE & NOISE (max.) Note.2 | 50mVp-p | | | 60mVp-p | | | 60mVp-p | | |
| | LINE REGULATION Note.3 | | | | $\pm 0.2\%$ | | | | | |
| | LOAD REGULATION Note.4 | | | | $\pm 0.5\%$ | | | | | |
| | VOLTAGE ACCURACY | | | | $\pm 2.0\%$ | | | | | |
| INPUT | SWITCHING FREQUENCY | | | | 150KHz min. | | | | | |
| | 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 | | | | | |
| PROTECTION (Note. 5) | FILTER | Pi network | | | | | | | | |
| | 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°C (Refer to output load derating curve) | | | | | | | | |
| | WORKING HUMIDITY | 20%~90% RH non-condensing | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -25~+105°C, 10~95% RH | | | | | | | | |
| | TEMP. COEFFICIENT | $\pm 0.03\% / ^\circ C$ (0~50°C) | | | | | | | | |
| SAFETY & EMC | VIBRATION | 10~500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:1KVDC | | | | | | | | |
| OTHERS | ISOLATION RESISTANCE | I/P-O/P: 100M Ohms / 500VDC | | | | | | | | |
| | MTBF | 300khrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 50.8*25.4*11.27mm or 2**1**0.44" inch (L*W*H) | | | | | | | | |
| | WEIGHT | 60g | | | | | | | | |

■ Mechanical Specification

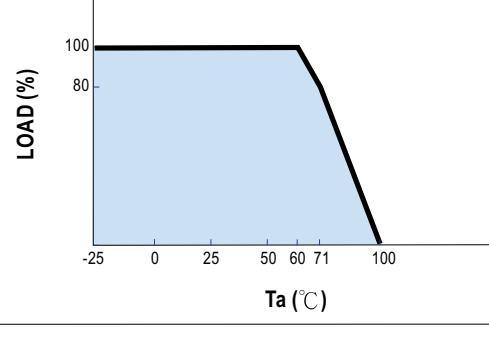
Unit: mm (inch)



■ Pin Configuration

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

■ Derating Curve



NOTE

- All parameters are specified at normal input, rated load, 25°C 70% RH. Ambient.
- Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
- Line regulation is measured from low line to high line at rated load.
- Load regulation is measured from 10% to 100% rated load.
- Please prevent the converter from operating in overload or short circuit condition for more than 30 seconds.

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