



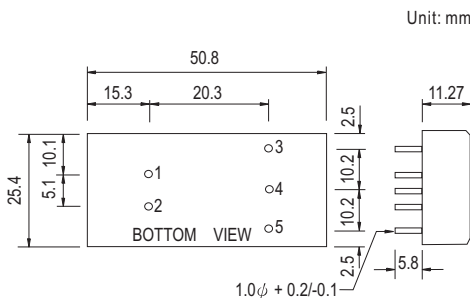
- Features :
  - 2:1 wide input range
  - 4:1 wide input range(option)
  - 1000VDC I/O isolation
  - 3000VDC I/O isolation(option)
  - Built-in EMI filter
  - Protections: Short circuit / Overload
  - Cooling by free air convection
  - Six-sided shield metal case
  - 100% burn-in test
  - Low cost / High reliability
  - Approvals: FCC / CE
  - 2 years warranty



## SPECIFICATION

| ORDER NO.                      | DKE10A-05                               | DKE10B-05 | DKE10C-05 | DKE10A-12  | DKE10B-12 | DKE10C-12 | DKE10A-15                   | DKE10B-15 | DKE10C-15 | DKE10A-24      | DKE10B-24 | DKE10C-24 |                        |     |     |
|--------------------------------|---|-----------|-----------|--|-----------|-----------|-----------------------------|-----------|-----------|----------------|-----------|-----------|------------------------|-----|-----|
| <b>OUTPUT</b>                  | <b>DC VOLTAGE</b>                       |           |           | ±5V  |           |           | ±12V                        |           |           | ±15V           |           |           | ±24V                   |     |     |
|                                | <b>CURRENT RANGE</b>                    |           |           | ±100 ~ ±1000mA   |           |           | ±42 ~ ±420mA                |           |           | ±33.3 ~ ±333mA |           |           | ±21 ~ ±210mA           |     |     |
|                                | <b>RATED POWER</b>                      |           |           | 10W  |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>RIPPLE &amp; NOISE (max.)</b> Note.2 |           |           | 50mVp-p  |           |           | 60mVp-p                     |           |           | 60mVp-p        |           |           | 80mVp-p                |     |     |
|                                | <b>LINE REGULATION</b> Note.3           |           |           | ±0.3%  |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>LOAD REGULATION</b> Note.4           |           |           | ±0.5%  |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>VOLTAGE ACCURACY</b>                 |           |           | ±2.0%  |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>SWITCHING FREQUENCY</b>              |           |           | 250KHz min.  |           |           |                             |           |           |                |           |           |                        |     |     |
| <b>INPUT</b>                   | <b>VOLTAGE RANGE</b>                    |           |           | A: 9 ~ 18VDC B: 18 ~ 36VDC C: 36 ~ 72VDC   |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>EFFICIENCY (Typ.)</b>                |           |           | 78%  | 81%       | 82%       | 80%                         | 80%       | 83%       | 80%            | 80%       | 82%       | 82%                    | 81% | 85% |
|                                | <b>DC CURRENT</b>                       |           |           | Full load  |           |           | A: 1100mA B: 530mA C: 270mA |           |           | No load        |           |           | A: 30mA B: 16mA C: 8mA |     |     |
|                                | <b>FILTER</b>                           |           |           | Pi network   |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>PROTECTION</b>                       |           |           | Fuse recommended   |           |           |                             |           |           |                |           |           |                        |     |     |
| <b>PROTECTION</b><br>(Note. 5) | <b>OVER CURRENT</b>                     |           |           | 160% ~ 250% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed         |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>SHORT CIRCUIT</b>                    |           |           | All output equipped with short circuit<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |           |           |                             |           |           |                |           |           |                        |     |     |
| <b>ENVIRONMENT</b>             | <b>WORKING TEMP.</b>                    |           |           | -25 ~ +71°C (Refer to output load derating curve)  |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>WORKING HUMIDITY</b>                 |           |           | 20% ~ 90% RH non-condensing  |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>STORAGE TEMP., HUMIDITY</b>          |           |           | -25 ~ +105°C, 10 ~ 95% RH  |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>TEMP. COEFFICIENT</b>                |           |           | ±0.03% / °C (0 ~ 50°C)   |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>VIBRATION</b>                        |           |           | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes  |           |           |                             |           |           |                |           |           |                        |     |     |
| <b>SAFETY &amp; EMC</b>        | <b>WITHSTAND VOLTAGE</b>                |           |           | I/P-O/P:1KVDC  |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>ISOLATION RESISTANCE</b>             |           |           | I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH  |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>EMC EMISSION</b>                     |           |           | Compliance to EN55022 Class B, FCC part 15 Class B   |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>EMC IMMUNITY</b>                     |           |           | Compliance to EN61000-4-2,3,4,5,6,8, light industry level, criteria A  |           |           |                             |           |           |                |           |           |                        |     |     |
| <b>OTHERS</b>                  | <b>MTBF</b>                             |           |           | 500Khrs min. MIL-HDBK-217F(25°C)   |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>DIMENSION</b>                        |           |           | 50.8*25.4*11.2mm or 2**1**0.44" inch (L*W*H)   |           |           |                             |           |           |                |           |           |                        |     |     |
|                                | <b>WEIGHT</b>                           |           |           | 32g  |           |           |                             |           |           |                |           |           |                        |     |     |

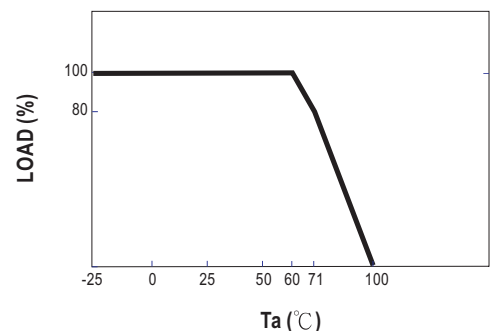
### Mechanical Specification



### Pin Configuration

| Pin No. | Output |
|---------|--------|
| 1       | +Vin   |
| 2       | -Vin   |
| 3       | +Vout  |
| 4       | COM    |
| 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.