



## Features :

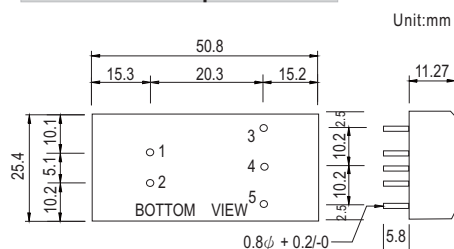
- 2:1 wide input range
- 4:1 wide input range(option)
- 1000VDC I/O isolation
- 3000VDC I/O isolation(option)
- Built-in EMI filter
- Protections: Short circuit / Overload
- Cooling by free air convection
- Six-sided shield metal case
- 100% burn-in test
- Low cost / High reliability
- Approvals: FCC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



## SPECIFICATION

| ORDER NO.                              |                                             | DLW05A-05                                                                              | DLW05B-05                      | DLW05C-05 | DLW05A-12      | DLW05B-12 | DLW05C-12 | DLW05A-15      | DLW05B-15 | DLW05C-15 |  |
|----------------------------------------|---------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------|-----------|----------------|-----------|-----------|----------------|-----------|-----------|--|
| OUTPUT                                 | DC VOLTAGE                                  | ±5V                                                                                    |                                |           | ±12V           |           |           | ±15V           |           |           |  |
|                                        | CURRENT RANGE                               | ±50 ~ ±500mA                                                                           |                                |           | ±20.8 ~ ±208mA |           |           | ±16.7 ~ ±167mA |           |           |  |
|                                        | RATED POWER                                 | 5W                                                                                     |                                |           |                |           |           |                |           |           |  |
|                                        | RIPPLE & NOISE (max.) <small>Note.2</small> | 50mVp-p                                                                                |                                |           | 60mVp-p        |           |           | 60mVp-p        |           |           |  |
|                                        | LINE REGULATION <small>Note.3</small>       | ±0.2%                                                                                  |                                |           |                |           |           |                |           |           |  |
|                                        | LOAD REGULATION <small>Note.4</small>       | ±0.5%                                                                                  |                                |           |                |           |           |                |           |           |  |
|                                        | VOLTAGE ACCURACY                            | ±2.0%                                                                                  |                                |           |                |           |           |                |           |           |  |
| SWITCHING FREQUENCY                    |                                             | 50KHz min.                                                                             |                                |           |                |           |           |                |           |           |  |
| INPUT                                  | VOLTAGE RANGE                               | A: 9 ~ 18VDC   B: 18 ~ 36VDC   C: 36 ~ 72VDC                                           |                                |           |                |           |           |                |           |           |  |
|                                        | EFFICIENCY (Typ.)                           | 75%                                                                                    | 77%                            | 77%       | 80%            | 82%       | 83%       | 81%            | 83%       | 85%       |  |
|                                        | DC CURRENT                                  | Full load                                                                              | A: 556mA   B: 270mA   C: 135mA |           |                |           |           |                |           |           |  |
|                                        |                                             | No load                                                                                | A: 33mA   B: 16mA   C: 10mA    |           |                |           |           |                |           |           |  |
|                                        | FILTER                                      | Pi network                                                                             |                                |           |                |           |           |                |           |           |  |
| PROTECTION                             |                                             | Fuse recommended                                                                       |                                |           |                |           |           |                |           |           |  |
| PROTECTION<br><small>(Note. 5)</small> | OVERLOAD                                    | 160 ~ 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 ~ +71℃ (Refer to "Derating Curve")                                                 |                                |           |                |           |           |                |           |           |  |
|                                        | WORKING HUMIDITY                            | 20% ~ 90% RH non-condensing                                                            |                                |           |                |           |           |                |           |           |  |
|                                        | STORAGE TEMP., HUMIDITY                     | -25 ~ +105℃, 10 ~ 95% RH                                                               |                                |           |                |           |           |                |           |           |  |
|                                        | TEMP. COEFFICIENT                           | ±0.03% / °C (0 ~ 50℃)                                                                  |                                |           |                |           |           |                |           |           |  |
|                                        | VIBRATION                                   | 10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes               |                                |           |                |           |           |                |           |           |  |
| SAFETY & EMC                           | SAFETY STANDARDS                            | EAC TP TC 004 approved                                                                 |                                |           |                |           |           |                |           |           |  |
|                                        | WITHSTAND VOLTAGE                           | I/P-O/P:1KVDC                                                                          |                                |           |                |           |           |                |           |           |  |
|                                        | ISOLATION RESISTANCE                        | I/P-O/P: 100M Ohms / 500VDC / 25℃ / 70% RH                                             |                                |           |                |           |           |                |           |           |  |
|                                        | EMC EMISSION                                | Compliance to EN55032 Class B, FCC part 15 Class B, EAC TP TC 020                      |                                |           |                |           |           |                |           |           |  |
|                                        | EMC IMMUNITY                                | Compliance to EN61000-4-2,3,4,5,6,8, light industry level, criteria A, EAC TP TC 020   |                                |           |                |           |           |                |           |           |  |
| OTHERS                                 | MTBF                                        | 800khrs min. MIL-HDBK-217F(25℃)                                                        |                                |           |                |           |           |                |           |           |  |
|                                        | DIMENSION                                   | 50.8*25.4*11.27mm or 2.0**1.0**0.44" inch (L*W*H)                                      |                                |           |                |           |           |                |           |           |  |
|                                        | WEIGHT                                      | 32g                                                                                    |                                |           |                |           |           |                |           |           |  |

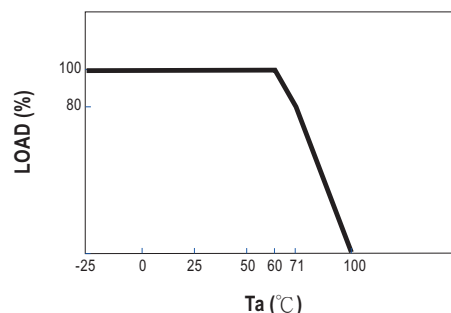
## Mechanical Specification



## Pin Configuration

| Pin no. | Output |
|---------|--------|
| 1       | +Vin   |
| 2       | -Vin   |
| 3       | +Vout  |
| 4       | COM    |
| 5       | -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 10% to 100% rated load.
- 5.Please prevent the converter from operating in overload or short circuit condition for more than 30 seconds.