

SPECIFICATION



Features:

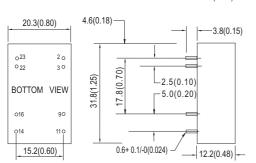
- 2:1 wide input range
- 4:1 wide input range(option)
- 1000VDC I/O isolation
- 3000VDC I/O isolation(option)
- · Built-in EMI filter
- Protections: Short circuit / Overload
- · Cooling by free air convection
- · Five-sided shield metal case
- 100% burn-in test
- · Low cost / High reliability
- · Approvals: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



| ORDER NO. | | DCW03A-05 | DCW03B-05 | DCW03C-05 | DCW03A-12 | DCW03B-12 | DCW03C-12 | DCW03A-15 | DCW03B-15 | DCW03C-15 |
|--------------------------|------------------------------|--|-----------|-----------|----------------|-----------|-----------|--------------|-----------|-----------|
| OUTPUT | DC VOLTAGE | ±5V | | | ±12V | | | ±15V | | |
| | CURRENT RANGE | ±30 ~ ±300mA | | | ±12.5 ~ ±125mA | | | ±10 ~ ±100mA | | |
| | RATED POWER | 3W | | | | | | | | |
| | RIPPLE & NOISE (max.) Note.2 | 50mVp-p | | | 60mVp-p | | | 60mVp-p | | |
| | LINE REGULATION Note.3 | ±0.5% | | | | | | | | |
| | LOAD REGULATION Note.4 | ±0.5% | | | | | | | | |
| | VOLTAGE ACCURACY | ±2.0% | | | | | | | | |
| | SWITCHING FREQUENCY | 50KHz min. | | | | | | | | |
| INPUT | VOLTAGE RANGE | A: 9 ~ 18VDC B: 18 ~ 36VDC C: 36 ~ 72VDC | | | | | | | | |
| | EFFICIENCY (Typ.) | 74% | 75% | 76% | 80% | 80% | 82% | 80% | 80% | 78% |
| | DC CURRENT | Full load A: 338mA B: 167mA C: 83mA | | | | | | | | |
| | | No load A: 18mA B: 10mA C: 5mA | | | | | | | | |
| | FILTER | Pi network | | | | | | | | |
| | PROTECTION | Fuse recommended | | | | | | | | |
| PROTECTION (Note. 5) | 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 SAFETY & EMC | WORKING TEMP. | -40 ~ + 71°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 VIBRATION | ±0.03% / °C (0 ~ 50°C) 10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes | | | | | | | | |
| | WITHSTAND VOLTAGE | 10 ~ 500Hz, 2G Tomini./ Lcycle, period for bomin. each along x, x, z axes I/P-O/P:1KVDC | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P: 100M Ohms / 500VDC / 25°C/ 70% RH | | | | | | | | |
| | ISOLATION CAPACITANCE | 80pF max. | | | | | | | | |
| | EMC EMISSION | Compliance to EN55022 Class B, FCC part 15 Class B | | | | | | | | |
| | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8, light industry level, criteria A | | | | | | | | |
| OTHERS | MTBF | 900khrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 31.8*20.3*12.2mm or 1.25"*0.80"*0.48" inch (L*W*H) | | | | | | | | |
| | WEIGHT | 15g | | | | | | | | |

■ Mechanical Specification

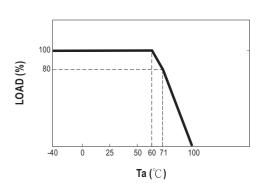
Unit:mm(inch)



■ Pin Configuration

| Pin No. | Output | | | | |
|---------|--------|--|--|--|--|
| 2 & 3 | -Vin | | | | |
| 9 | COM | | | | |
| 11 | -Vout | | | | |
| 14 | +Vout | | | | |
| 16 | COM | | | | |
| 22 & 23 | +Vin | | | | |

■ 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.