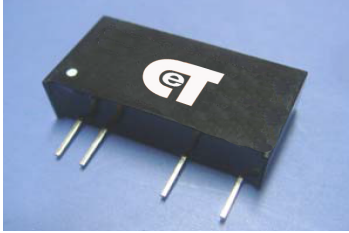


CT-12D-6KV SERIES

6000Vdc Isolation Single & Dual Output 1 Watt Dc-Dc Converter



FEATURES:

- 7PIN SIP Package
- High Efficiency up to 85%
- Unregulated Output Types
- Internal SMD Construction
- No External Component Required
- Industry Standard Pinout
- Operating Temperature: -40°C TO +85°C



Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

| Part Number | Output Voltage | Output Current | Efficiency |
|----------------|----------------|----------------|------------|
| | Vdc | mA | %TYP |
| CT-XXS05N6KVNL | 5 | 200 | 70 |
| CT-XXS09N6KVNL | 9 | 112 | 75 |
| CT-XXS12N6KVNL | 12 | 84 | 78 |
| CT-XXS15N6KVNL | 15 | 67 | 80 |
| CT-XXS24N6KVNL | 24 | 42 | 82 |
| CT-XXD05N6KVNL | ±5 | ±100 | 70 |
| CT-XXD09N6KVNL | ±9 | ±56 | 75 |
| CT-XXD12N6KVNL | ±12 | ±42 | 78 |
| CT-XXD15N6KVNL | ±15 | ±34 | 80 |
| CT-XXD24N6KVNL | ±24 | ±21 | 82 |

Note.: 1. "XX" Is Input Voltage :03=3.3Vdc,05=5Vdc,09=9Vdc,12=12Vdc,15=15Vdc,24=24Vdc.

2. The input voltage increases, there will be an increase in efficiency.

Input Specifications

| Parameters | Conditions | Min | Typ | Max | Units |
|-------------------|------------|-----|-----|-----|-------|
| Voltage Tolerance | Vo, Io Nom | | | ±5 | % |
| Filter | Capacitor | | | | |

Output Specifications

| Parameters | Conditions | Min | Typ | Max | Units |
|---------------------------------|----------------------------------|-----|-----|-------|-------|
| Voltage Tolerance | 100% full load | | | ±5 | % |
| Short Circuit Protection | Short Term | | | 1 Sec | |
| Line Regulation | For 1.0% OF Vin | | 1.2 | | % |
| Load Regulation | 5V(10% To 100% F.L) | | | 15 | % |
| Load Regulation | 9V,12V,15V, 24V(10% To 100% F.L) | | | 10 | % |
| Ripple & Noise | BW=DC To 20MHz | | | 100 | mVp-p |
| Transient response setting time | 50% load step change | | 350 | | us |

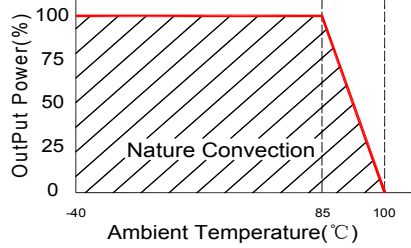
General Specifications

| Parameters | Conditions | Min | Typ | Max | Units |
|-----------------------|-------------------------|---------|----------------|-----|-------|
| Isolation Resistance | 500Vdc | 1000 | | | MΩ |
| Switching Frequency | Full load,nominal input | | 100 | | KHz |
| Operation Temperature | | -40 | | +85 | °C |
| Humidity | Non Condensing | | | 95 | % |
| Cooling | Free air Convection | | | | |
| Case material | DAP | | | | |
| MTBF | MIL-HDBK-217F@25°C | 3500000 | | | Hours |
| Weight | | | 2.7 | | g |
| Dimensions | | | 19.5x7.10x10.0 | | mm |

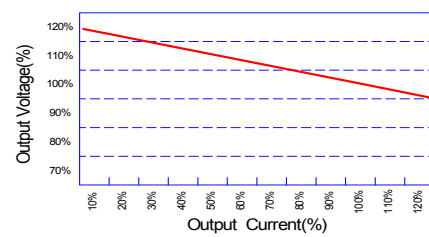
CT-12D-6KV SERIES

6000Vdc Isolation Single & Dual Output 1 Watt Dc-Dc Converter

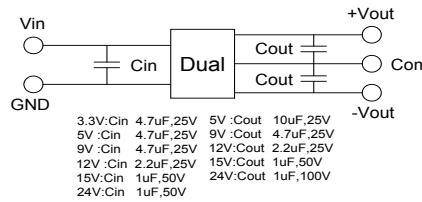
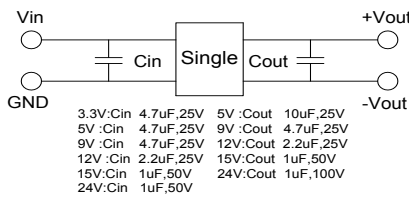
Temperature Derating Graph



Tolerance Envelope Graph



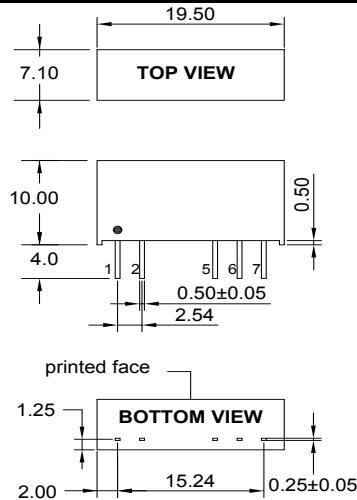
Recommended Test Circuit



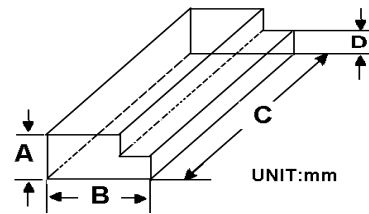
Part Number

12D - 05 S 05 N 6KV NL
 A B C D E F G
 A:Series
 B:Input Voltage
 C:Single(S)Dual(D)
 D:Output Voltage
 E:Unregulated(N)
 F:Isolation Voltage
 G:RoHS Version

Markings and dimensions



Packaging



| Size(mm) | | | |
|----------|------|-----|-----|
| A | B | C | D |
| 9.5 | 16.5 | 522 | 5.0 |

UNIT:mm Unless otherwise specified,all tolerances are ±0.25

PIN Connection

| PIN | 1 | 2 | 5 | 6 | 7 |
|--------|------|------|-------|--------|-------|
| Single | +Vin | -Vin | -Vout | No Pin | +Vout |
| Dual | +Vin | -Vin | -Vout | Common | +Vout |