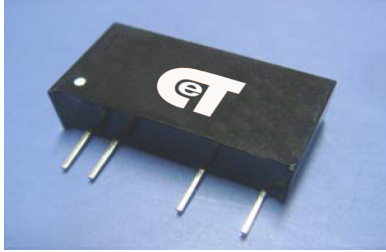


## CT-12D-2W SERIES

### 3000Vdc Isolation Single & Dual Output 2 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-XXS05N2WNL	5	400	70
CT-XXS09N2WNL	9	222	75
CT-XXS12N2WNL	12	167	80
CT-XXS15N2WNL	15	133	80
CT-XXS24N2WNL	24	84	85
CT-XXD05N2WNL	±5	±200	70
CT-XXD09N2WNL	±9	±111	75
CT-XXD12N2WNL	±12	±84	80
CT-XXD15N2WNL	±15	±67	80
CT-XXD24N2WNL	±24	±42	85

Note: 1. "XX" Is Input Voltage :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	V <sub>o</sub> , I <sub>o</sub> 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

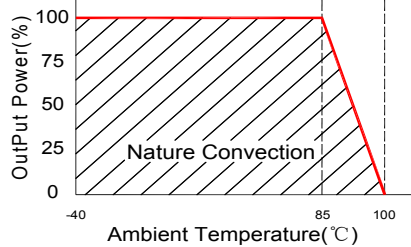
#### General Specifications

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			19.5x7.1x10.0		mm

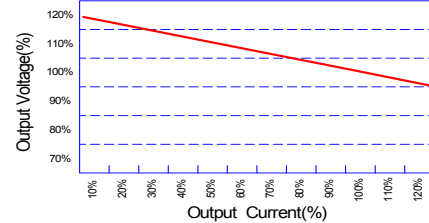
## CT-12D-2W SERIES

### 3000Vdc Isolation Single & Dual Output 2 Watt Dc-Dc Converter

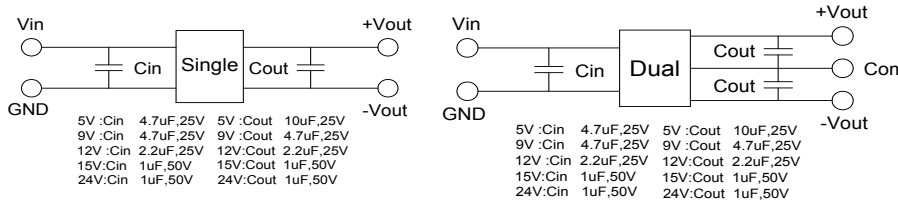
#### Temperature Derating Graph



#### Tolerance Envelope Graph



#### Recommended Test Circuit

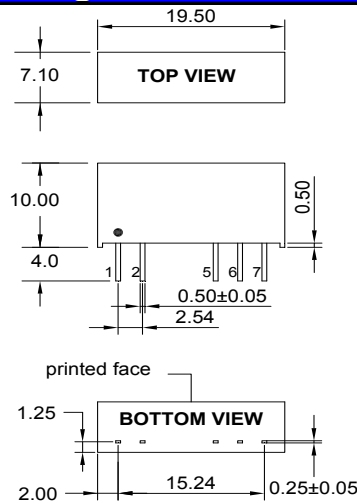


#### Part Number

12D - 05 S 05 N 2W NL  
 A B C D E F G

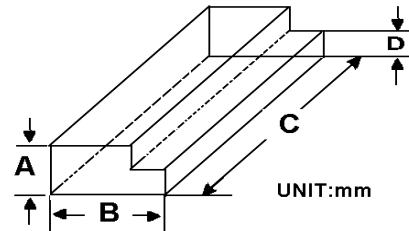
A:Series  
 B:Input Voltage  
 C:Single(S) Dual(D)  
 D:Output Voltage  
 E:Unregulated(N)  
 F:Output Power  
 G:RoHS Version

#### Markings and dimensions



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

#### Packaging



Size(mm)			
A	B	C	D
9.50	16.50	522	5.00

#### PIN Connection

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