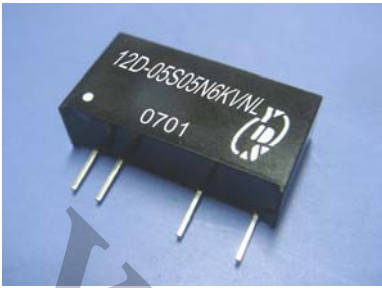


# Yuan Dean Scientific CO.,LTD 12D-6KV SERIES

## 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
12D-XXS05N6KVNL	5	200	70
12D-XXS09N6KVNL	9	112	75
12D-XXS12N6KVNL	12	84	78
12D-XXS15N6KVNL	15	67	80
12D-XXS24N6KVNL	24	42	82
12D-XXD05N6KVNL	±5	±100	70
12D-XXD09N6KVNL	±9	±56	75
12D-XXD12N6KVNL	±12	±42	78
12D-XXD15N6KVNL	±15	±34	80
12D-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

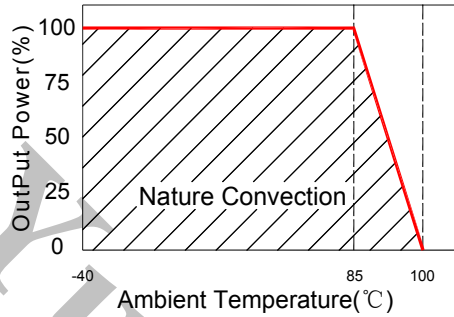
### General Specifications

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

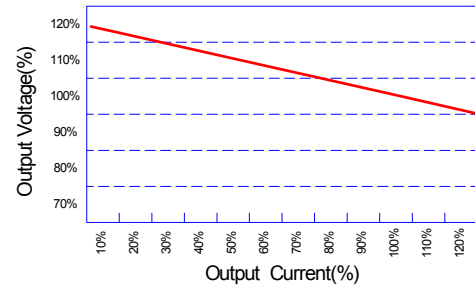
# Yuan Dean Scientific CO.,LTD 12D-6KV SERIES

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

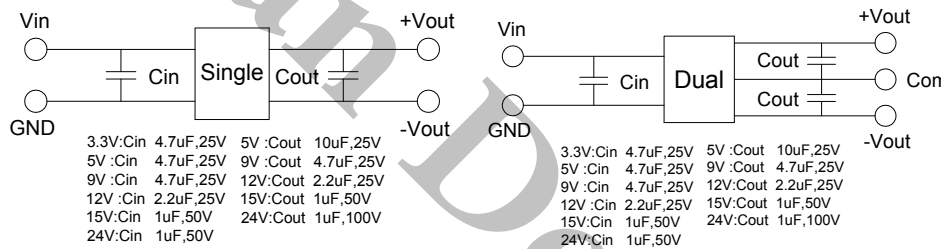
### Temperature Derating Graph



### Tolerance Envelope Graph



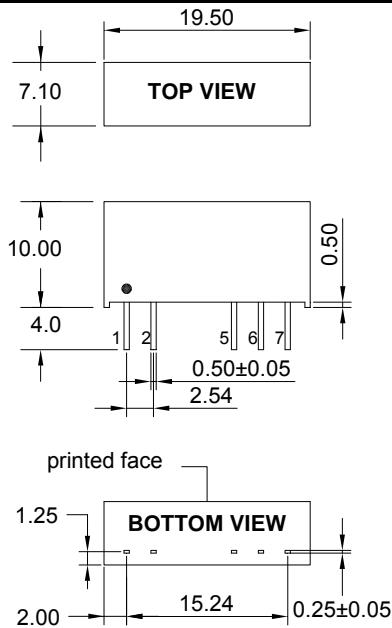
### Recommended Test Circuit



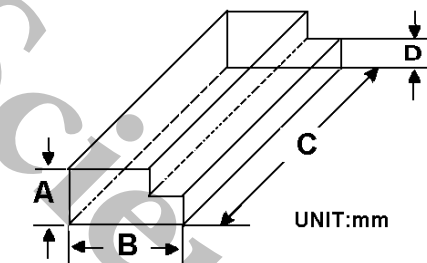
### Part Number

**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