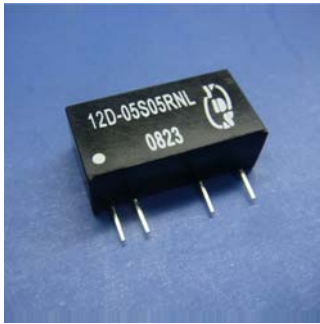




## 3000Vdc Single Output 1 Watt Dc-Dc Converter



### FEATURES:

- 7PIN SIP Package
- High Efficiency up to 80%
- Regulated 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-XXS05RNL	5	200	65
12D-XXS09RNL	9	112	70
12D-XXS12RNL	12	84	70
12D-XXS15RNL	15	67	70
12D-XXS24RNL	24	42	70

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	Vo, Io Nom			±5	%
Filter	Capacitor				

### Output Specifications

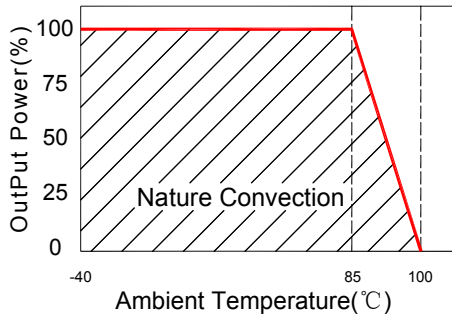
Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load			±5	%
Short Circuit Protection	Continuous				
Line Regulation	Regulated			±0.5	%
Load Regulation	Regulated			±1.5	%
Ripple & Noise	Output:5V,9V TYPES BW=DC To 20MHz			100	mVp-p
Ripple & Noise	Output:12-24V TYPES BW=DC To 20MHz			1% of Vout	mVp-p
Transient response setting time	50% load step change		350		us

### General Specifications

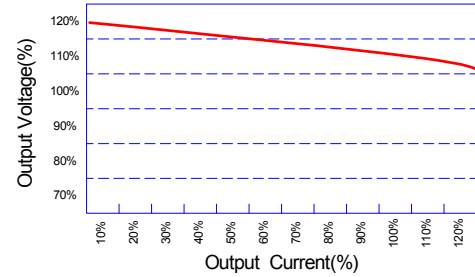
Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load,nominal input		100		KHz
Operation Temperature		-40		+85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25°C	3500000			Hours
Weight			2.7		g
Dimensions		19.5x7.1x10.0			mm



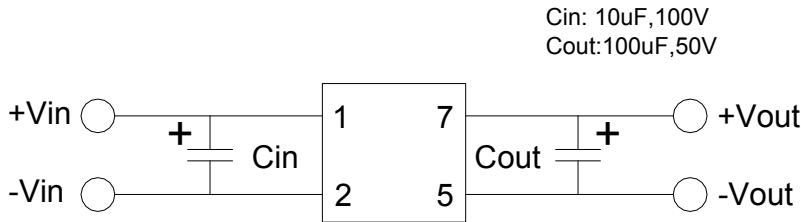
Temperature Derating Graph



Tolerance Envelope Graph



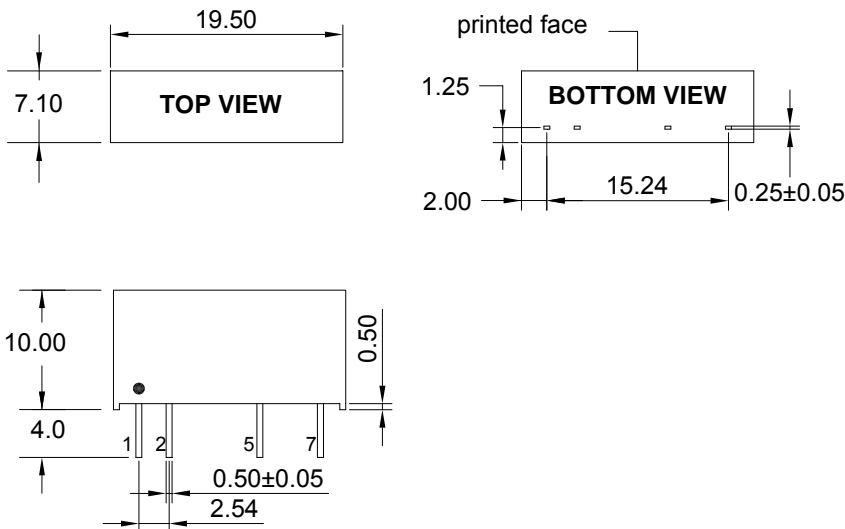
Recommended Test Circuit



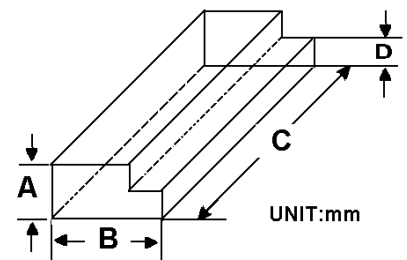
Part Number

12D - 05 S 05 R NL  
A B C D E F  
A:Series  
B:Input Voltage  
C:Single(S)Dual(D)  
D:Output Voltage  
E:Regulated(R)  
F:RoHS Version

Markings and dimensions



Packaging



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

PIN Connection				
PIN	1	2	5	7
Single	+Vin	-Vin	-Vout	+Vout

Size(mm)			
A	B	C	D
9.5	16.5	5.22	5.0