

FEATURES :

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

YUAN DEAN SCIENTIFIC



DC-DC Converter

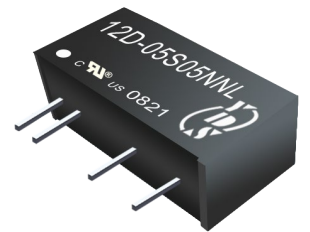
12D-3KV SERIES

1Watt

3KV Isolated

Single & Dual Output

SIP7



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

Part Number	Output Voltage	Output Current	Efficiency	Package Style	UL 60950-1
	Vdc	mA	%TYP		
12D-XXS03NYNL	3.3	303	70	1/2	12D-05S05NNL 12D-05S09NNL 12D-05S12NNL 12D-05S15NNL 12D-12S05NNL 12D-12S09NNL 12D-12S12NNL 12D-12S15NNL 12D-15S05NNL 12D-15S15NNL 12D-15S24NNL
12D-XXS05NYNL	5	200	70	1/2	
12D-XXS09NYNL	9	112	75	1/2	
12D-XXS12NYNL	12	84	78	1/2	
12D-XXS15NYNL	15	67	80	1/2	
12D-XXS24N2NL	24	42	82	2	
12D-XXD03NYNL	±3.3	±150	70	1/2	
12D-XXD05NYNL	±5	±100	70	1/2	
12D-XXD09NYNL	±9	±56	75	1/2	
12D-XXD12NYNL	±12	±42	78	1/2	
12D-XXD15NYNL	±15	±34	80	1/2	
12D-XXD24N2NL	±24	±21	82	2	

Note :

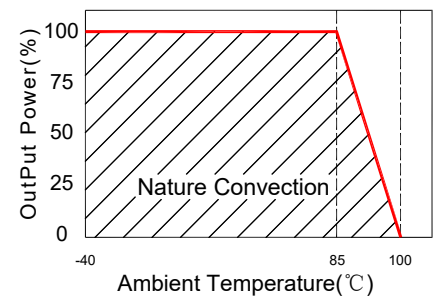
- 1."XX" is input voltage: 03=3.3Vdc 05=5Vdc, 09=9Vdc, 12=12Vdc, 15=15Vdc, 24=24Vdc,48=48Vdc.
2. Y = 1 or 2 for package , No suffix Y package1 , When Y=2 , package2
3. When the input voltage is 24 VDC or 48 VDC or the output voltage is 24 VDC, only package 2 can be used.



Input Specifications

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

Temperature Derating Graph



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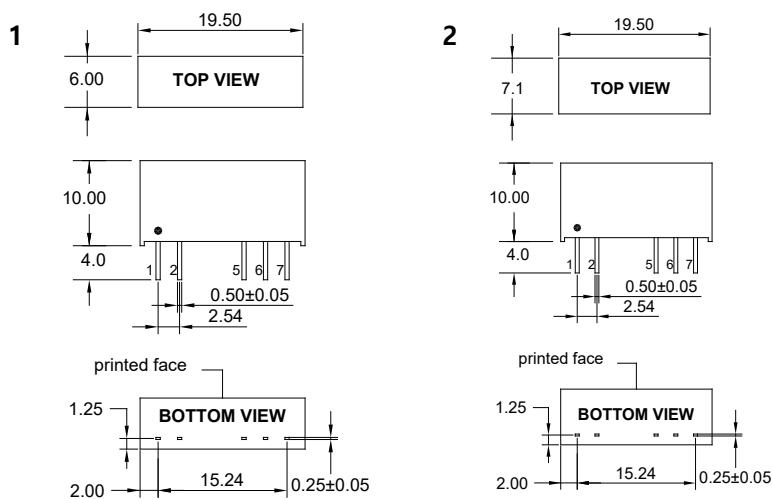
Output Specifications

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	3.3V,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
Operating Temperature		-40		+85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25°C	3500000			Hours
Weight	Package 1 or Package2		2.1 or 2.7		g
Dimensions	Package 1		19.5x6.0x10.0		mm
Dimensions	Package 2		19.5x7.1x10.0		mm

Markings and Dimensions

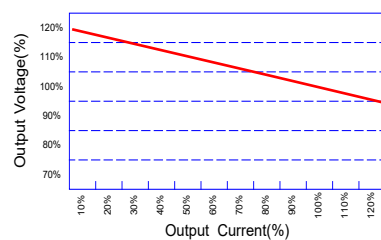


Unit: mm Unless otherwise specified, all tolerances are ±0.25

PIN Connection

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

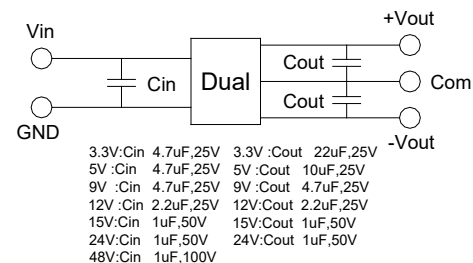
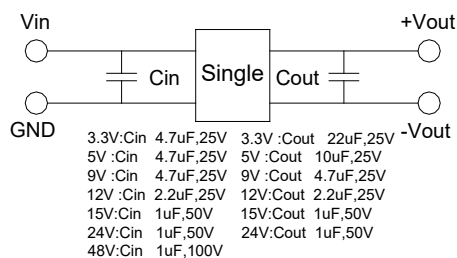
Tolerance Envelope Graph



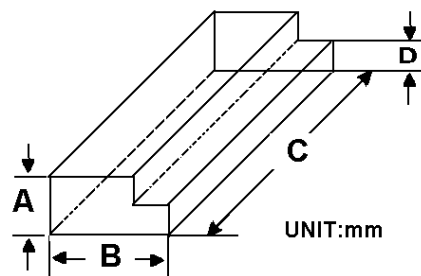
Part Number

12D - 05 S 05 N 2 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:Package
 G:RoHS Version

Recommended Test Circuit



Packaging



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

