

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-XXS05N2WNL	5	400	70
12D-XXS09N2WNL	9	222	75
12D-XXS12N2WNL	12	167	80
12D-XXS15N2WNL	15	133	80
12D-XXS24N2WNL	24	84	85
12D-XXD05N2WNL	±5	±200	70
12D-XXD09N2WNL	±9	±111	75
12D-XXD12N2WNL	±12	±84	80
12D-XXD15N2WNL	±15	±67	80
12D-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	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

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DC-DC Converter

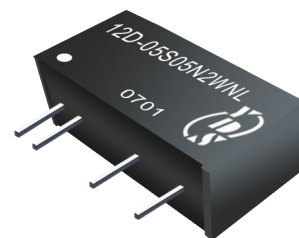
12D-2W SERIES

2Watt

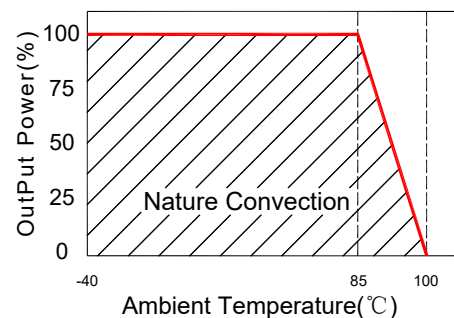
3KV Isolated

Single & Dual Output

SIP7



Temperature Derating Graph



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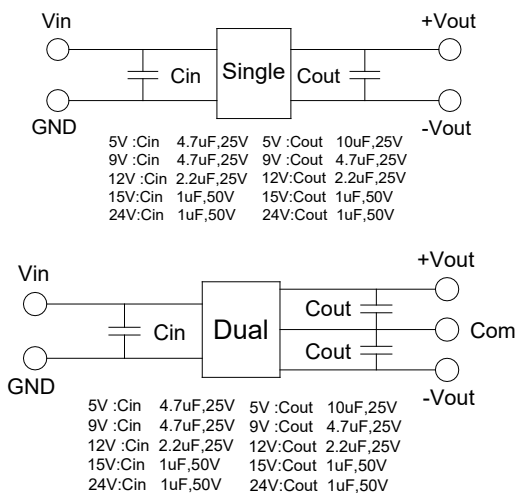
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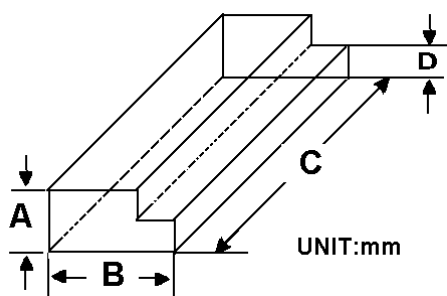
General Specifications

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			2.7		g
Dimensions			19.5x7.10x10.0		mm

Recommended Test Circuit

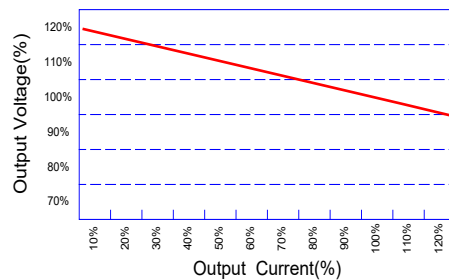


Packaging



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

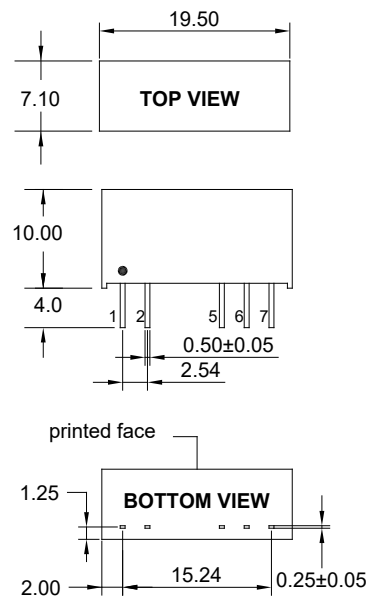
Tolerance Envelope Graph



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

PIN Connection

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

