

**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-XXS05N6KV	5	200	70
★12D-XXS09N6KV	9	112	75
★12D-XXS12N6KV	12	84	78
★12D-XXS15N6KV	15	67	80
12D-XXS24N6KV	24	42	82
12D-XXD05N6KV	±5	±100	70
12D-XXD09N6KV	±9	±56	75
12D-XXD12N6KV	±12	±42	78
12D-XXD15N6KV	±15	±34	80
12D-XXD24N6KV	±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.
  3. "★" marked as recognized by UL 60950-1. (Without input voltage: 03=3.3Vdc, 09=9Vdc)

**Input Specifications**

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Vo,Io Nom			±10	%
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



DC-DC Converter

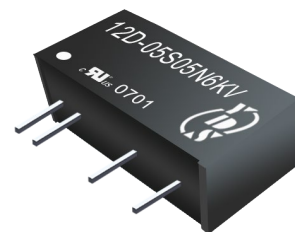
12D-6KV SERIES

1Watt

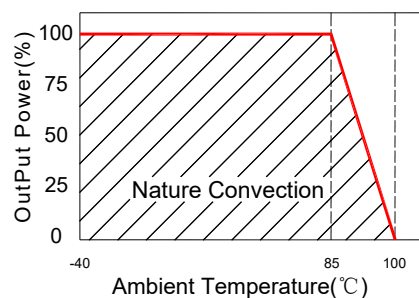
6KV Isolated

Single & Dual Output

SIP7



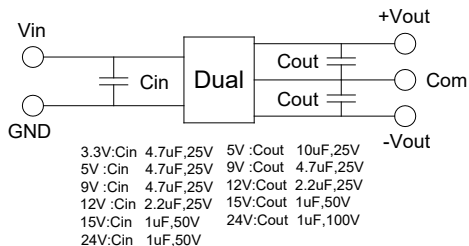
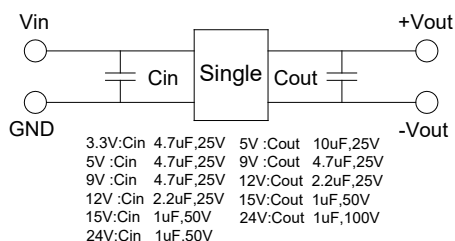
**Temperature Derating Graph**



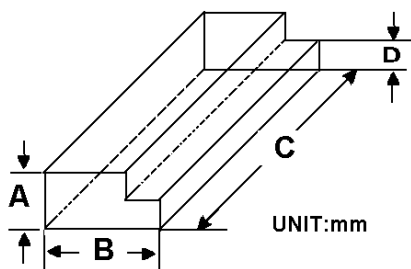
General Specifications

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

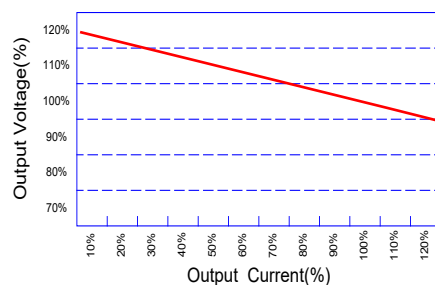


Packaging



Size (mm)			
A	B	C	D
9.5	16.5	52.2	5.0

Tolerance Envelope Graph

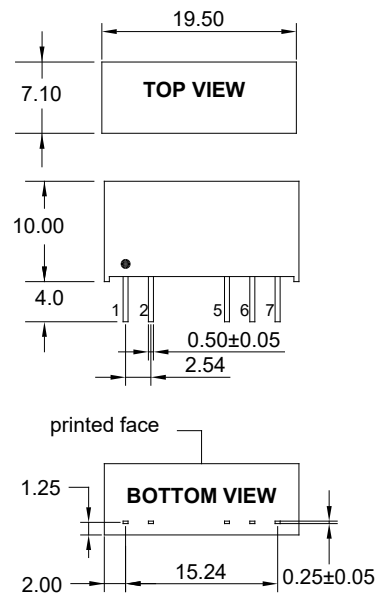


Part Number

12D - 05 S 05 N 6KV  
 A B C D E F

- A:Series
- B:Input Voltage
- C:Single(S)Dual(D)
- D:Output Voltage
- E:Unregulated(N)
- F:Isolation Voltage

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

