

FEATURES :

- 7PIN SIP Package
- High Efficiency up to 85%
- Unregulated Output Types
- Internal SMD Construction
- 1KVDC & 1.5KVDC Isolation
- No External Component Required
- Industry Standard Pinout
- Operating Temperature:-40°C TO +85°C

YUAN DEAN SCIENTIFIC



DC-DC Converter

14D SERIES

1Watt

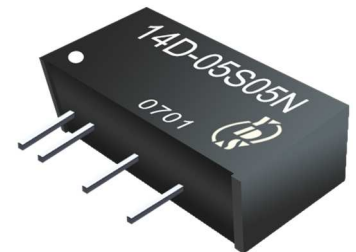
1KV & 1.5KV Isolated

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
	Vdc	mA	%TYP	
14D-XXS03N (NL/1.5KV)	3.3	303	70	1
14D-XXS05N (NL/1.5KV)	5	200	70	1
14D-XXS09N (NL/1.5KV)	9	112	75	1
14D-XXS12N (NL/1.5KV)	12	84	78	1
14D-XXS15N (NL/1.5KV)	15	67	80	1
14D-XXS24N (NL/1.5KV)	24	42	82	1
14D-XXD03N (NL/1.5KV)	±3.3	±150	70	1
14D-XXD05N (NL/1.5KV)	±5	±100	70	1
14D-XXD09N (NL/1.5KV)	±9	±56	75	1
14D-XXD12N (NL/1.5KV)	±12	±42	78	1
14D-XXD15N (NL/1.5KV)	±15	±34	80	1
14D-XXD24N (NL/1.5KV)	±24	±21	82	1
14D-XXS05N2 (NL/1.5KV)	5	200	70	2
14D-XXS09N2 (NL/1.5KV)	9	112	75	2
14D-XXS12N2 (NL/1.5KV)	12	84	78	2
14D-XXS15N2 (NL/1.5KV)	15	67	80	2
14D-XXS24N2 (NL/1.5KV)	24	42	82	2
14D-XXD05N2 (NL/1.5KV)	±5	±100	70	2
14D-XXD09N2 (NL/1.5KV)	±9	±56	75	2
14D-XXD12N2 (NL/1.5KV)	±12	±42	78	2
14D-XXD15N2 (NL/1.5KV)	±15	±34	80	2
14D-XXD24N2 (NL/1.5KV)	±24	±21	82	2



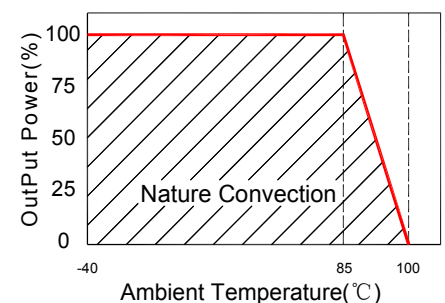
Note:

- 1."XX" Is Input Voltage:03 = 3.3Vdc,05=5Vdc,09=9Vdc,12=12Vdc,15=15Vdc,24=24Vdc,48=48Vdc.
2. Over 48Vdc input voltage, using the 2nd package.
3. The input voltage increases, there will be an increase in efficiency.
4. No suffix is standard isolation (1KVDC) e.g. 14D-05S05N1,14D-05S05N2NL
*add suffix /1.5KV for 1.5KVDC isolation, e.g. 14D-05S05N1.5KV,14D-05S05N21.5KV

Input Specifications

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

Temperature Derating Graph



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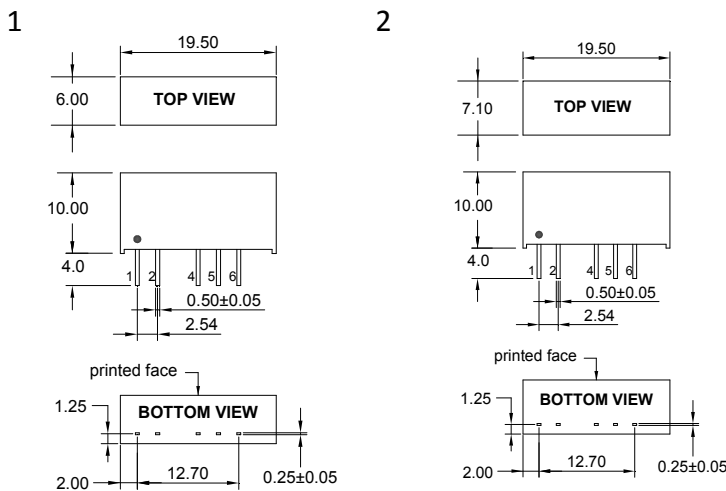
Output Specifications

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	Package1 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

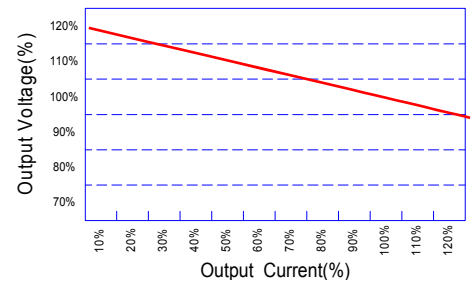


Unit : mm Unless otherwise specified, all tolerances are ±0.25

PIN Connection

PIN	1	2	4	5	6
Single	+Vin	-Vin	-Vout	NO PIN	+Vout
Dual	+Vin	-Vin	-Vout	Common	+Vout

Tolerance Envelope Graph



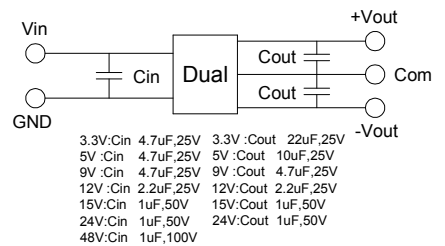
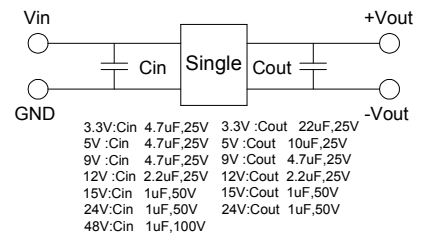
Part Number

14D - 05 S 05 N 2 NL 14D - 24 S 24 N 2 1.5KV
A B C D E F G A B C D E F G

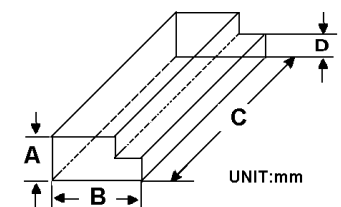
A:Series
B:Input Voltage
C:Single(S)Dual(D)
D:Output Voltage
E:Unregulated(N)
F:Package
G:RoHS Version

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

Recommended Test Circuit



Packaging



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

