



Yuan Dean Scientific CO.,LTD 13D-2W SERIES

1000vdc Isolation Single Output 2 Watt Dc-Dc Converter



FEATURES:

- 4PIN SIP Package.
- High Efficiency up to 85%.
- Unregulated Output Types.
- Internal SMD Construction
- Operating Temperature:-40℃ TO +85℃
- No External Component Required ● Industry Standard Pinout



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	%
13D-XXS05N2WNL	5	400	70
13D-XXS09N2WNL	9	222	75
13D-XXS12N2WNL	12	167	80
13D-XXS15N2WNL	15	133	80
13D-XXS24N2WNL	24	84	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			± 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	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

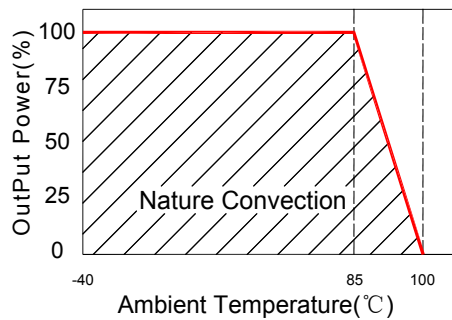
Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load,nominal input		100		KHz
Operating Temperature		-40		85	℃
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25℃	3500000			Hours
Weight			1.8		g
Dimensions		11.50x7.50x10.00			mm



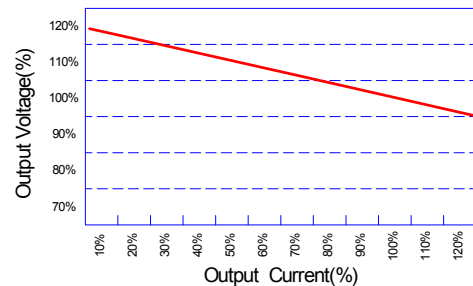
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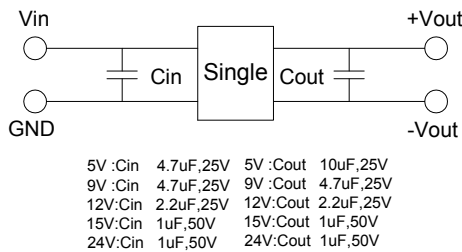
Temperature Derating Graph



Tolerance Envelope Graph



Recommended Test Circuit

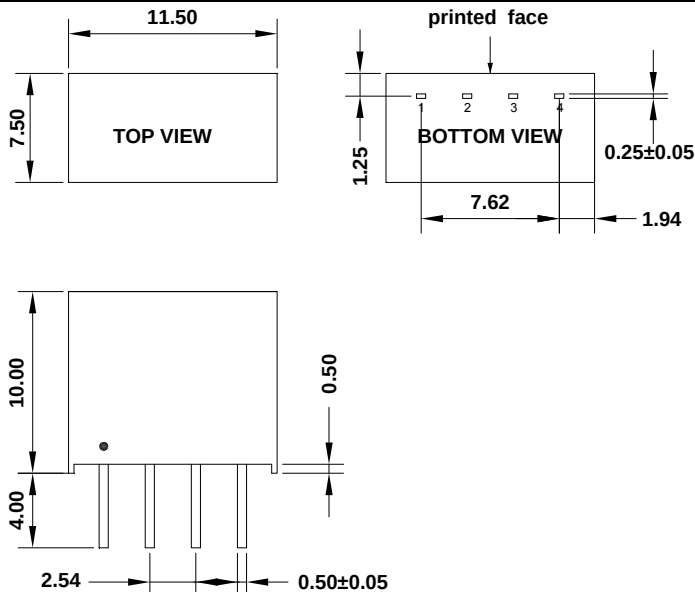


Part Number

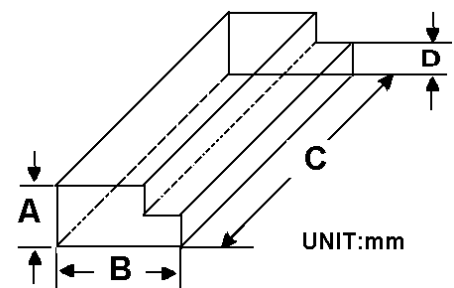
13D - 05 S 05 N 2W NL
 A B C D E F G

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

Markings and Dimensions



Packaging



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

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

PIN Connection

PIN	1	2	3	4
Single	-Vin	+Vin	-Vout	+Vout