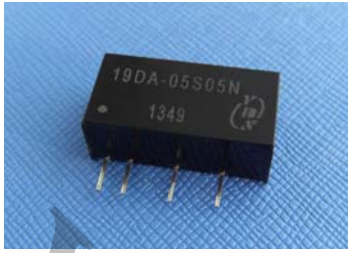




# Yuan Dean Scientific CO.,LTD 19DA SERIES

## 1000Vdc Isolation Single & Dual Output 2 Watt Dc-Dc Converter



### FEATURES:

- 7PIN SIP Package
- High Efficiency up to 88%
- Unregulated Output Types
- Internal SMD Construction
- 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	Ripple & Noise		Efficiency
	Vdc	mA	Typ(mVp-p)	Max(mVp-p)	%Typ
19DA-05S05N	5	400	40	60	82
19DA-05S09N	9	222	40	60	86
19DA-05S12N	12	167	50	80	87
19DA-05S15N	15	133	50	80	86
19DA-12S05N	5	400	40	60	83
19DA-12S09N	9	222	40	60	87
19DA-12S12N	12	167	50	80	88
19DA-12S15N	15	133	50	80	87
19DA-15S05N	5	400	40	60	84
19DA-15S09N	9	222	40	60	86
19DA-15S12N	12	167	50	80	87
19DA-15S15N	15	133	50	80	88
19DA-24S05N	5	400	40	60	84
19DA-24S09N	9	222	40	60	87
19DA-24S12N	12	167	50	80	87
19DA-24S15N	15	133	50	80	88
19DA-05D05N	±5	±200	50	80	82
19DA-05D09N	±9	±111	50	80	85
19DA-05D12N	±12	±84	50	80	86
19DA-05D15N	±15	±67	50	80	86
19DA-12D05N	±5	±200	50	80	84
19DA-12D09N	±9	±111	50	80	87
19DA-12D12N	±12	±84	50	80	87
19DA-12D15N	±15	±67	50	80	87
19DA-15D05N	±5	±200	50	80	84
19DA-15D09N	±9	±111	50	80	86
19DA-15D12N	±12	±84	50	80	88
19DA-15D15N	±15	±67	50	80	88
19DA-24D05N	±5	±200	50	80	85
19DA-24D09N	±9	±111	50	80	87
19DA-24D12N	±12	±84	50	80	88
19DA-24D15N	±15	±67	50	80	88

### 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,9V (10% To 100% F.L)			10	%
Load Regulation	12V,15V (10% To 100% F.L)			7	%
Load Regulation	±5V,±9V (10% To 100% F.L)			9	%
Load Regulation	±12V,±15V (10% To 100% F.L)			6	%

# Yuan Dean Scientific CO.,LTD      19DA SERIES

## 1000Vdc Isolation Single & Dual Output 2 Watt Dc-Dc Converter

General Specifications					
Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load,nominal input		75		KHz
Operation 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			19.5x7.1x10.0		mm

### Temperature Derating Graph

Nature Convection

### Part Number

19DA - 05 S 05 N

A      B    C    D    E

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

### Recommended Test Circuit

5V :Cin 4.7uF,25V    5V :Cout 10uF,25V  
12V:Cin 2.2uF,25V    9V :Cout 4.7uF,25V  
15V:Cin 1uF,50V      12V:Cout 2.2uF,25V  
24V:Cin 1uF,50V      15V:Cout 1uF,50V

5V :Cin 4.7uF,25V    5V :Cout 10uF,25V  
12V:Cin 2.2uF,25V    9V :Cout 4.7uF,25V  
15V:Cin 1uF,50V      12V:Cout 2.2uF,25V  
24V:Cin 1uF,50V      15V:Cout 1uF,50V

### Markings and dimensions

### Packaging

UNIT:mm

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	Com	+Vout

Size(mm)			
A	B	C	D
9.5	16.5	5.22	5.0