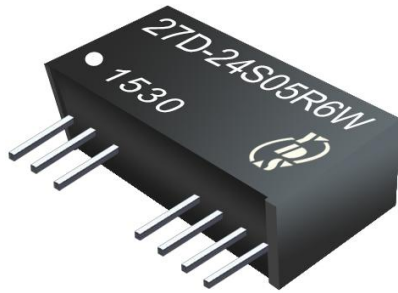




# Yuan Dean Scientific CO.,LTD 27D- 6W SERIES

## 6Watt Single & Dual Output Regulated 1500Vdc Isolation Dc-Dc Converter



### FEATURES:

- 2:1 Wide Input Voltages Range
- High Efficiency up to 88%
- Regulated Output Types
- Internal SMD Construction
- Operating Temperature: -40°C TO +85°C
- Industry Standard Pinout
- Continuous Short Circuit Protection With Current Foldback.



Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Input Voltage Range	Nominal Input Voltage	Output Voltage Range	Output Current	Efficiency
	Vdc	Vdc	Vdc	mA	%TYP
27D-12S03R6W	9-18	12	3.3	1500	84
27D-12S05R6W	9-18		5	1200	85
27D-12S09R6W	9-18		9	666	86
27D-12S12R6W	9-18		12	500	87
27D-12S15R6W	9-18		15	400	88
27D-12S24R6W	9-18		24	250	88
27D-24S03R6W	18-36	24	3.3	1500	84
27D-24S05R6W	18-36		5	1200	85
27D-24S09R6W	18-36		9	666	86
27D-24S12R6W	18-36		12	500	87
27D-24S15R6W	18-36		15	400	88
27D-24S24R6W	18-36		24	250	88
27D-48S03R6W	36-72	48	3.3	1500	84
27D-48S05R6W	36-72		5	1200	85
27D-48S09R6W	36-72		9	666	86
27D-48S12R6W	36-72		12	500	87
27D-48S15R6W	36-72		15	400	88
27D-48S24R6W	36-72		24	250	88
27D-12D05R6W	9-18	12	±5	±600	85
27D-12D12R6W	9-18		±12	±250	87
27D-12D15R6W	9-18		±15	±200	87
27D-24D05R6W	18-36	24	±5	±600	85
27D-24D12R6W	18-36		±12	±250	87
27D-24D15R6W	18-36		±15	±200	87
27D-48D05R6W	36-72	48	±5	±600	85
27D-48D12R6W	36-72		±12	±250	87
27D-48D15R6W	36-72		±15	±200	87

### Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Type				2:1	
Input current at no load (Nominal input voltage)	12V models 24V models 48V models		60 30 15		mA
Filter	Capacitor				



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Output Specifications					
Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load			±2	%
Short Circuit Protection	Continuous,Auto-Recovery				
Line Regulation				±0.5	%
Load Regulation	Single output models Dual output models			±0.5 ±5	%
Ripple & Noise	Output:3-10V TYPES BW=DC To 20MHz			100	mVp-p
Ripple & Noise	Output > 10V TYPES BW=DC To 20MHz			1% of Vout	mVp-p
Transient response setting time	50% load step change		350		us

General Specifications					
Parameters	Conditions	Min	Typ	Max	Units
Isolation Voltage			1500		Vdc
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load,nominal input		500		KHz
Operating Temperature		-40		85	°C
Storage Temperature		-55		125	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25°C	1500000			Hours
Weight			4.5		g
Dimensions			21.8X9.2X11.1		mm

### Temperature Derating Graph

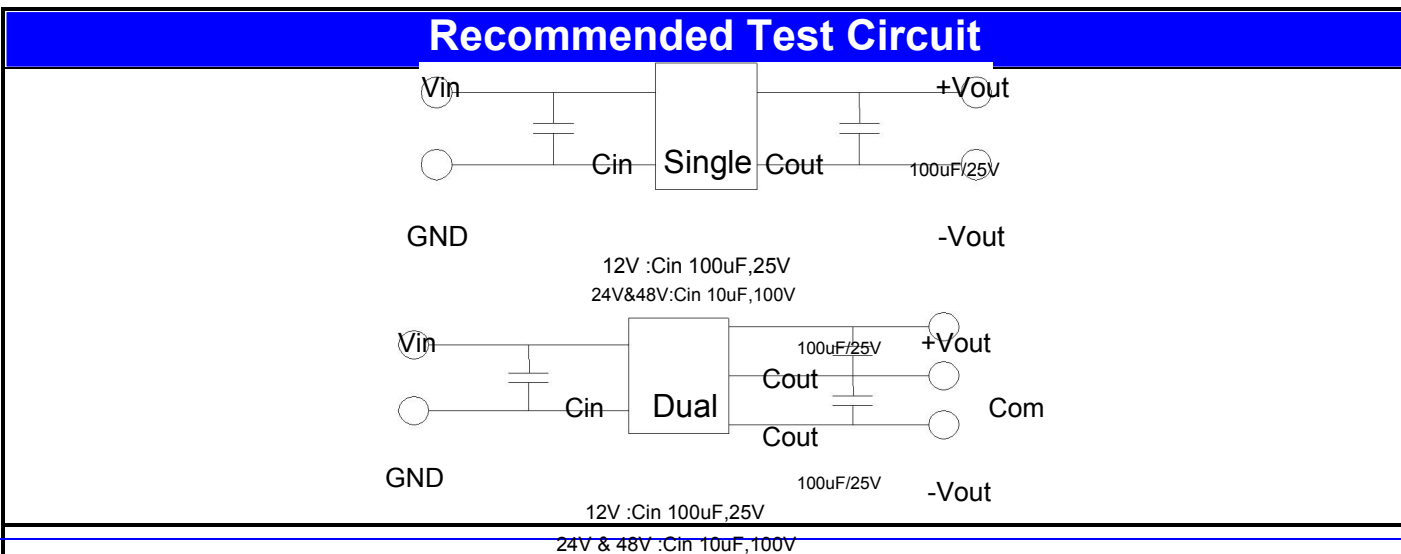
Output Power(%)

Ambient Temperature(°C)

### Part Number

**27D - 24 S 05 R 6W**  
**A B C D E F**

**A: Series**  
**B: Input Voltage**  
**C: Single Output**  
**D: Output Voltage**  
**E: Regulated(R)**  
**F: Watt**

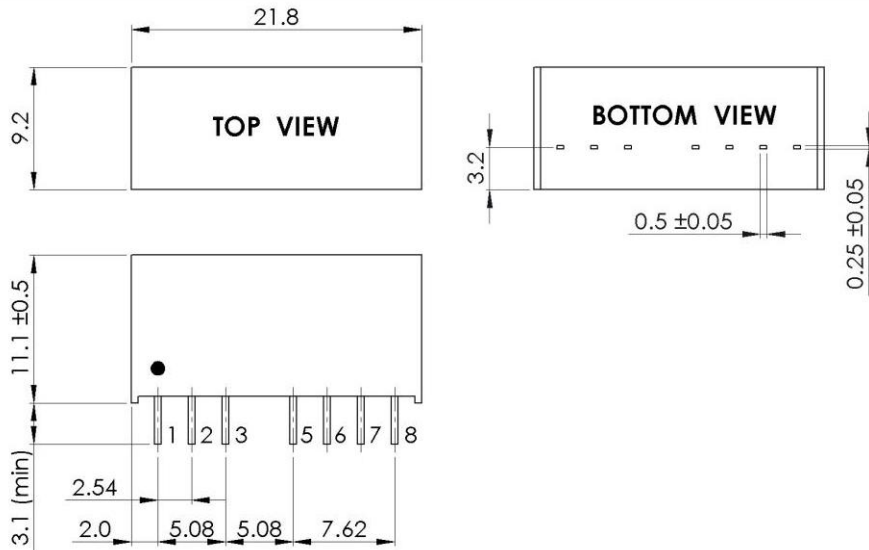




# Yuan Dean Scientific CO.,LTD 27D- 6W SERIES

6Watt Single & Dual Output Regulated 1500Vdc Isolation Dc-Dc Converter

## Markings and Dimensions



UNIT: mm

tolerances are  $XX.X \pm 0.5$ ,  $XX.XX \pm 0.25$ , the tolerance of Pin size is  $\pm 0.05$

## PIN Assignment

PIN	1	2	3	5	6	7	8
Single	-Vin	+Vin	Ctrl	NC	+Vout	-Vout	NC
Dual	-Vin	+Vin	Ctrl	NC	+Vout	COM	-Vout