

**FEATURES :**

- 9W SIP8 Package
- 4:1 Wide Input Voltages Range
- High Efficiency up to 89%
- Customized Solutions Available
- Remote Control: On/Off
- Operating Temperature: -40°C TO +75°C
- UL94V-0 Package Material
- EMC Standard of EMI EN55032:2012+AC:2013 (Class B) Approved
- EMC Standard of EMS EN55024:2010 Approved
- 3 Years Warranty

YUAN DEAN SCIENTIFIC



DC-DC Converter

27DW-9W SERIES

9Watt 1.6KV Isolated

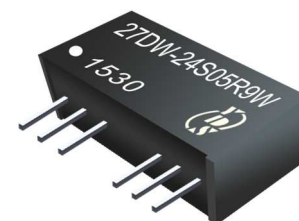
4 : 1 Input Voltage Range

Single & Dual Output

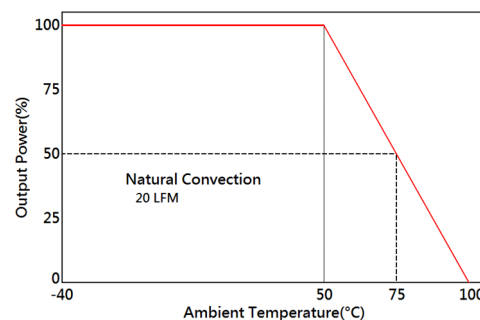
SIP8

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

Part Number	Input Voltage Range	Input Current		Output Voltage Range	Output Current	Efficiency
	Vdc	No Load (mA TYP)	Full Load (mA TYP)	Vdc	mA	%TYP
27DW-24S03R9W	9-36	7	335	3.3	2000	82
27DW-24S05R9W	9-36	7	392	5	1600	85
27DW-24S12R9W	9-36	7	426	12	750	88
27DW-24S15R9W	9-36	7	426	15	600	88
27DW-24S24R9W	9-36	7	421	24	375	89
27DW-48S03R9W	18-75	7	168	3.3	2000	82
27DW-48S05R9W	18-75	7	196	5	1600	85
27DW-48S12R9W	18-75	7	213	12	750	88
27DW-48S15R9W	18-75	7	213	15	600	88
27DW-48S24R9W	18-75	7	211	24	375	89
27DW-24D05R9W	9-36	7	388	±5	±800	86
27DW-24D12R9W	9-36	7	426	±12	±375	88
27DW-24D15R9W	9-36	7	426	±15	±300	88
27DW-48D05R9W	18-75	7	196	±5	±800	85
27DW-48D12R9W	18-75	7	213	±12	±375	88
27DW-48D15R9W	18-75	7	216	±15	±300	87



Temperature Derating Graph



**Input Specifications**

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types	Vo, Io Nom			4:1	
Filter	Capacitor				

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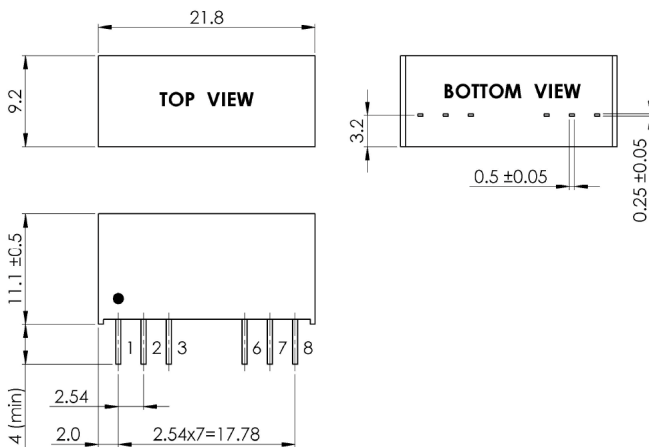
Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load			±2	%
Short Circuit Protection	Continuous, Auto-Recovery				
Line Regulation		-0.5		+0.5	%
Load Regulation	Single output models Dual output models	-0.5 -5.0		+0.5 +5.0	%
Ripple & Noise	Output:3-10V TYPES BW=DC To 20MHz			100	mVp-p
	Output > 10V TYPES BW=DC To 20MHz		1%	of Vout	mVp-p
Transient response setting time	25% load step change		250		us

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Isolation Voltage			1600		Vdc
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency (Full load, nominal input)	Single Dual		400 500		KHz
Operating Temperature	With derating	-40		75	°C
Storage Temperature		-55		125	°C
Humidity	Non Condensing			95	%
Cooling	Natural Convection (20LFM)				
Case material	Plastic				
MTBF	MIL-HDBK-217F@25°C	2.696 x 10 <sup>6</sup>			Hours
Weight			4.8		g
Dimensions		21.8X9.2X11.1			mm

Dimensions



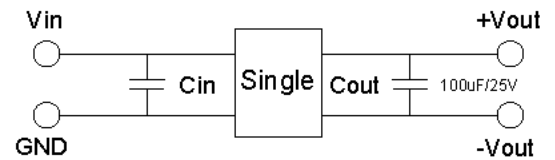
Unit : mm  
Tolerance : XX.X ± 0.5 , XX.XX ± 0.25

Part Number

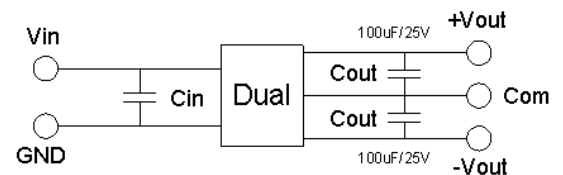
27DW	-	24	S	05	R	9W
A		B	C	D	E	F

- A : Series
- B : Input Voltage
- C : Single(S);Dual(D)
- D : Output Voltage
- E : Regulated(R)
- F : Watt

Recommended Test Circuit



24V&48V: Cin 10uF,100V



24V & 48V : Cin 10uF,100V

PIN Assignment

Pin	1	2	3	6	7	8
Single	-Vin	+Vin	Remote ON/OFF	+Vout	-Vout	NC
Dual	-Vin	+Vin	Remote ON/OFF	+Vout	Com	-Vout