

**FEATURES :**

- 4:1Wide Input Voltages Range
- High Efficiency up to 80%
- Regulated Output Types
- Low Ripple And Noise
- Internal SMD Construction
- 1KVDC & 3KVDC Isolation
- Operating Temperature:-40°C TO +85°C
- Industry Standard Pinout
- Continuous Short Circuit Protection With Current Fold back

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

Part Number	Input Voltage Range	Output Voltage Range	Output Current	Efficiency
	Vdc	Vdc	mA	%TYP
27DW-24D05RNL/3KV	9-36	±5	±200	75
27DW-24D09RNL/3KV	9-36	±9	±111	80
27DW-24D12RNL/3KV	9-36	±12	±84	80
27DW-24D15RNL/3KV	9-36	±15	±67	80
27DW-24D24RNL/3KV	9-36	±24	±42	80
27DW-48D05RNL/3KV	18-75	±5	±200	70
27DW-48D09RNL/3KV	18-75	±9	±111	80
27DW-48D12RNL/3KV	18-75	±12	±84	80
27DW-48D15RNL/3KV	18-75	±15	±67	80
27DW-48D24RNL/3KV	18-75	±24	±42	80

NOTE: No suffix is standard isolation (1KVDC) e.g, 27DW-24D05RNL , \*add suffix /3KV for 3KVDC isolation, e.g, 27DW--24D05R3KV

**Input Specifications**

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

**Output Specifications**

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load			±3	%
Short Circuit Protection	Continuous				
Line Regulation	Regulated			±0.5	%
Load Regulation	Regulated			±0.8	%
Ripple & Noise	Output:5-9V TYPES BW=DC To 20MHz			100	mVp-p
Ripple & Noise	Output:12-24V TYPES BW=DC To 20MHz			1% of Vout	mVp-p
Transient response setting time	50% load step change		350		us



DC-DC Converter

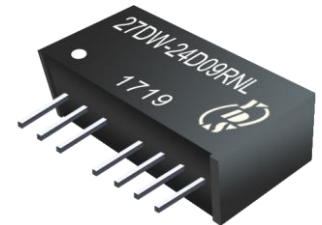
**27DW-Dual SERIES**

2Watt 1KV & 3KV Isolated

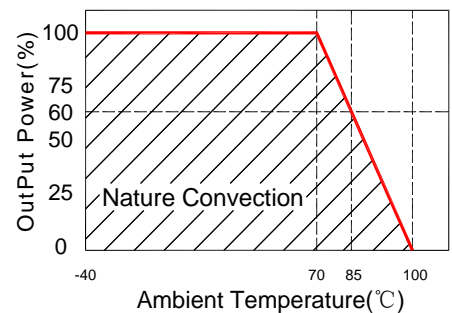
4 : 1 Input Voltage Range

Dual Output

SIP8



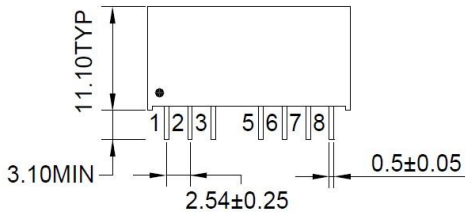
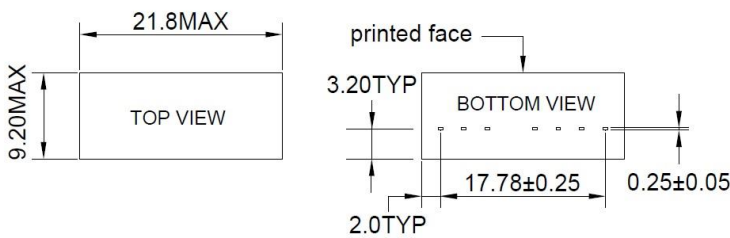
**Temperature Derating Graph**



General Specifications

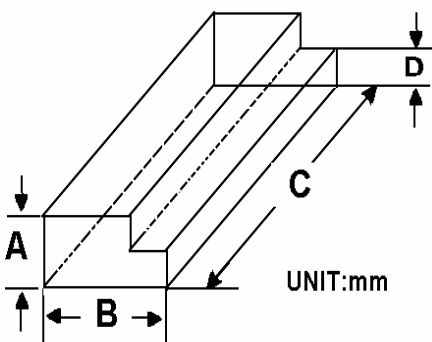
Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load, nominal input		100		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25°C	1500000			Hours
Weight			4.5		g
Dimensions			21.8X9.2X11.1		mm

Markings and dimensions



UNIT : mm TYP tolerances are ±0.5

Packaging



Size(mm)			
A	B	C	D
12.0	28.55	550	6.00

PIN Connection

Pin	1	2	3	5	6	7	8
1KV	-Vin	+Vin	Ctrl-Control input can (can be left open)	NE-No external connection allowed	+Vout	COM	-Vout
3KV	-Vin	+Vin	Ctrl-Control input can(can be left open)	NO PIN	+Vout	COM	-Vout

Part Number

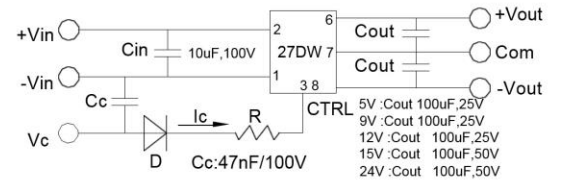
27DW	-	24	D	05	R	NL
A		B	C	D	E	F

- A : Series
- B : Input Voltage
- C : Dual Output
- D : Output Voltage
- E : Regulated(R)
- F : RoHS Version

27DW	-	24	D	05	R	3KV
A		B	C	D	E	F

- A : Series
- B : Input Voltage
- C : Dual Output
- D : Output Voltage
- E : Regulated(R)
- F : Isolation Voltage

Recommended Test Circuit



- When open or high impedance, the converter works well; when this pin is 'high', the converter shut down. It should be note that the input current should be between 5-10mA, exceeding the maximum 20mA will cause permanent damage to the converter.
- To make sure the product work at perfect operation status with full loading external capacitor is necessary and it is recommended to use high frequency low resistance electrolytic capacitor.