

**FEATURES :**

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

YUAN DEAN SCIENTIFIC



DC-DC Converter

16D-Single SERIES

1Watt 1KV Isolated

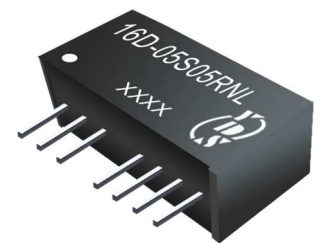
2 : 1 Input Voltage Range

Single Output

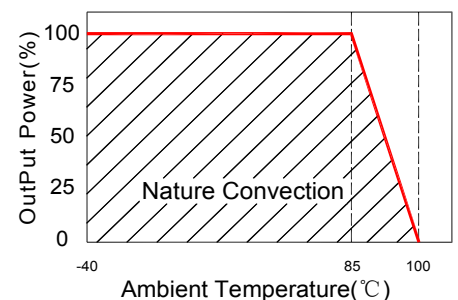
SIP8

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

Part Number	Input Voltage	Output Voltage	Output Current	Efficiency
	Vdc	Vdc	mA	%TYP
16D-05S05RNL	5-9	5	200	60
16D-05S09RNL	5-9	9	111	70
16D-05S12RNL	5-9	12	84	70
16D-05S15RNL	5-9	15	67	70
16D-05S24RNL	5-9	24	42	70
16D-12S05RNL	9-18	5	200	70
16D-12S09RNL	9-18	9	111	80
16D-12S12RNL	9-18	12	84	80
16D-12S15RNL	9-18	15	67	80
16D-12S24RNL	9-18	24	42	80
16D-24S05RNL	18-36	5	200	75
16D-24S09RNL	18-36	9	111	80
16D-24S12RNL	18-36	12	84	80
16D-24S15RNL	18-36	15	67	80
16D-24S24RNL	18-36	24	42	80
16D-48S05RNL	36-72	5	200	70
16D-48S09RNL	36-72	9	111	80
16D-48S12RNL	36-72	12	84	80
16D-48S15RNL	36-72	15	67	80
16D-48S24RNL	36-72	24	42	80



Temperature Derating Graph



**Input Specifications**

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types	Vo, Io Nom			2:1	
Filter	Capacitor				

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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:5V-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

General Specifications

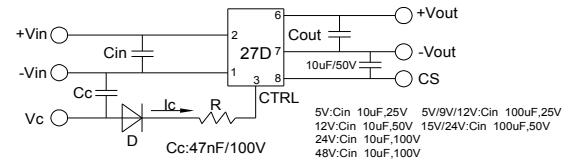
Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load, nominal input		100		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F @25°C	1500000			Hours
Weight			4.5		g
Dimensions		21.8x9.2x11.1			mm

Part Number

16D - 05 S 05 R NL  
A B C D E F

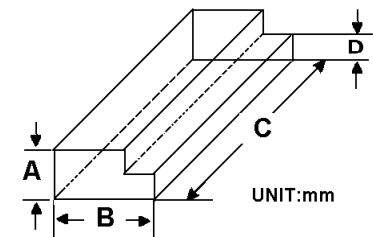
A:Series  
B:Input Voltage  
C:Single(S)  
D:Output Voltage  
E:Regulated(R)  
F:RoHS Version

Recommended Test Circuit



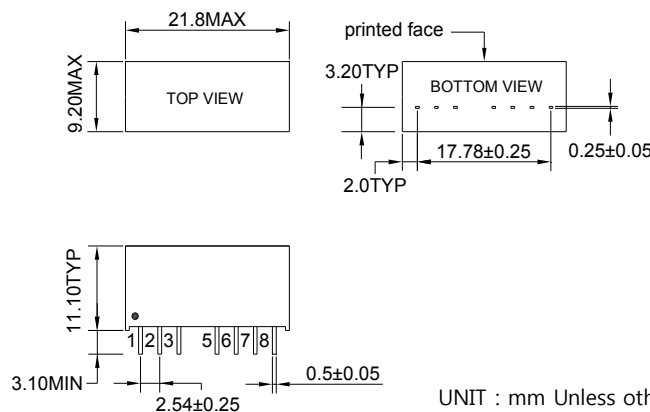
- When open or high impedance, the converter works well; When this pin is 'high', the converter shut down. It should be note that the input current should be between 5-10mA,exceeding the maximum 20mA will cause permanent damage to the converter.
- To make sure the product work at perfect operation status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

Packaging



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

Markings and dimensions



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

PIN Connection

Pin	1	2	3	5	6	7	8
Single	-Vin	+Vin	Ctrl-Control input can (can be left open)	NE-No external connection allowed	+Vout	-Vout	CS Optional External capacitor

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