



2 Watt Dual Output Regulated 1000vdc Isolation Dc-Dc Converter



FEATURES:

- 2:1 Wide Input Voltages Range
- High Efficiency up to 85%
- Regulated Output Types
- Low Ripple And Noise
- 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	Output Voltage Range	Output Current	Efficiency
	Vdc	Vdc	mA	%TYP
27D-05D05RNL	5-9	±5	±200	65
27D-05D09RNL	5-9	±9	±111	70
27D-05D12RNL	5-9	±12	±84	70
27D-05D15RNL	5-9	±15	±67	70
27D-05D24RNL	5-9	±24	±42	80
27D-12D05RNL	9-18	±5	±200	70
27D-12D09RNL	9-18	±9	±111	80
27D-12D12RNL	9-18	±12	±84	80
27D-12D15RNL	9-18	±15	±67	80
27D-12D24RNL	9-18	±24	±42	80
27D-24D05RNL	18-36	±5	±200	75
27D-24D09RNL	18-36	±9	±111	80
27D-24D12RNL	18-36	±12	±84	80
27D-24D15RNL	18-36	±15	±67	80
27D-24D24RNL	18-36	±24	±42	80
27D-48D05RNL	36-72	±5	±200	70
27D-48D09RNL	36-72	±9	±111	80
27D-48D12RNL	36-72	±12	±84	80
27D-48D15RNL	36-72	±15	±67	80
27D-48D24RNL	36-72	±24	±42	80

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Vo, Io Nom			2:1	
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

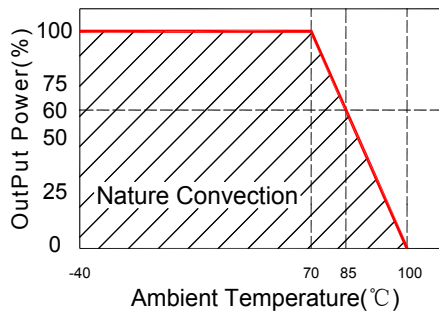
General Specifications

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



2 Watt Dual Output Regulated 1000vdc Isolation Dc-Dc Converter

Temperature Derating Graph



Part Number

27D - 05 D 05 R NL

A B C D E F

A:Series

B:Input Voltage

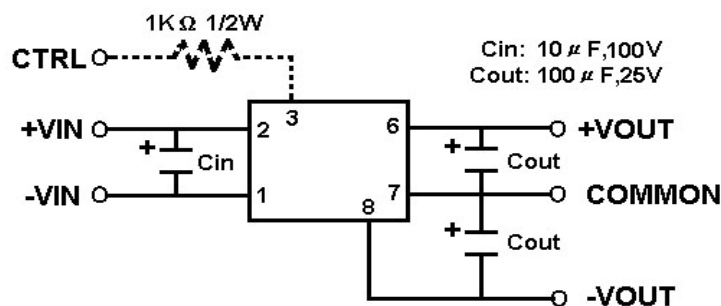
C:Dual(D)

D:Output Voltage

E:Regulated(R)

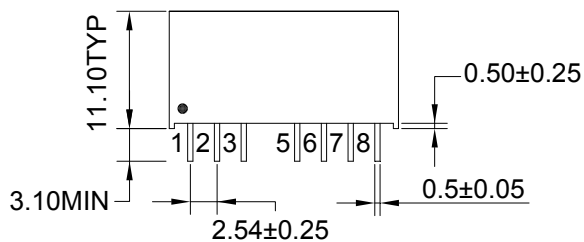
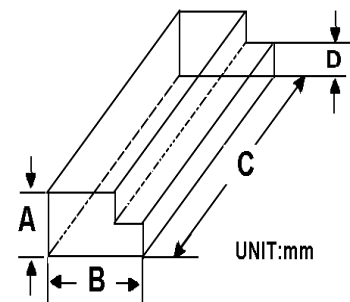
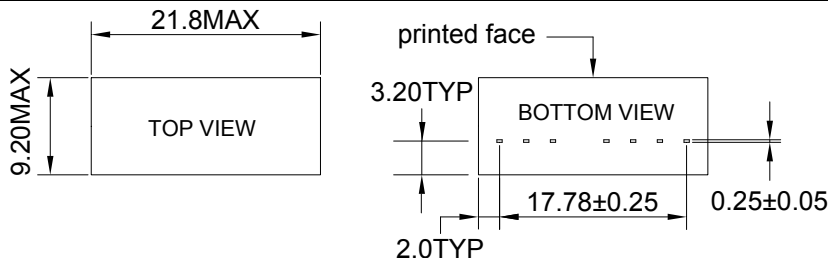
F:RoHS Version

Recommended Test Circuit



Markings and Dimensions

Packaging



UNIT : mm TYP tolerances are ±0.5

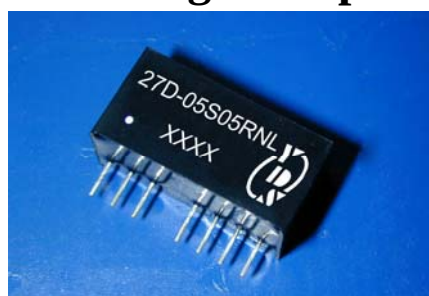
Size(mm)			
A	B	C	D
12.0	28.55	550	6.00

PIN Connection

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



2Watt Single Output Regulated 1000vdc Isolation Dc-Dc Converter



FEATURES:

- 2:1 Wide Input Voltages Range
- High Efficiency up to 85%
- Regulated Output Types
- Low Ripple And Noise
- 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	Output Voltage Range	Output Current	Efficiency
	Vdc	Vdc	mA	%TYP
27D-05S05RNL	5-9	5	400	65
27D-05S09RNL	5-9	9	222	70
27D-05S12RNL	5-9	12	167	70
27D-05S15RNL	5-9	15	133	70
27D-05S24RNL	5-9	24	84	70
27D-12S05RNL	9-18	5	400	70
27D-12S09RNL	9-18	9	222	80
27D-12S12RNL	9-18	12	167	80
27D-12S15RNL	9-18	15	133	80
27D-12S24RNL	9-18	24	84	80
27D-24S05RNL	18-36	5	400	75
27D-24S09RNL	18-36	9	222	80
27D-24S12RNL	18-36	12	167	80
27D-24S15RNL	18-36	15	133	80
27D-24S24RNL	18-36	24	84	80
27D-48S05RNL	36-72	5	400	70
27D-48S09RNL	36-72	9	222	80
27D-48S12RNL	36-72	12	167	80
27D-48S15RNL	36-72	15	133	80
27D-48S24RNL	36-72	24	84	80

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	Vo, Io Nom			2:1	
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

General Specifications

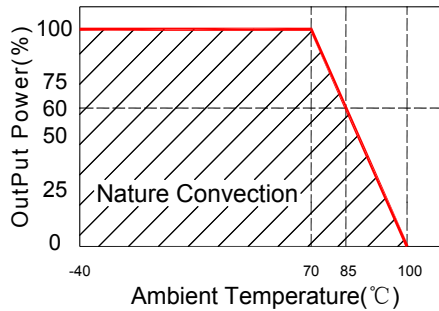
Parameters	Conditions	Min	Typ	Max	Units
Isolation Resistance	500Vdc	1000			MΩ
Switching Frequency	Full load, nominal input		100		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
MTBF	MIL-HDBK-217F@25°C	1500000			Hours
Weight		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



Yuan Dean Scientific CO.,LTD 27D-Single SERIES

2Watt Single Output Regulated 1000vdc Isolation Dc-Dc Converter

Temperature Derating Graph

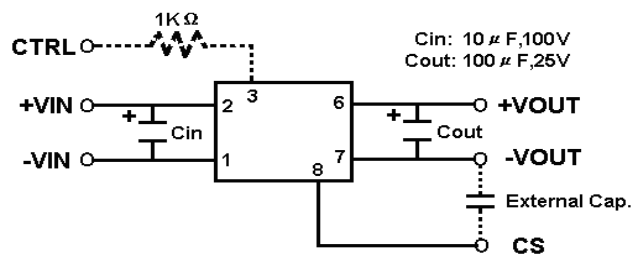


Part Number

27D - 05 S 05 R NL
A B C D E F

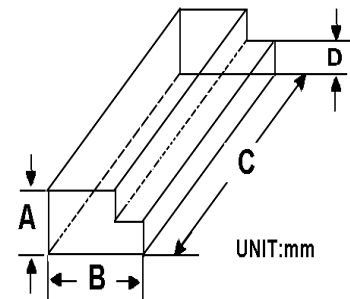
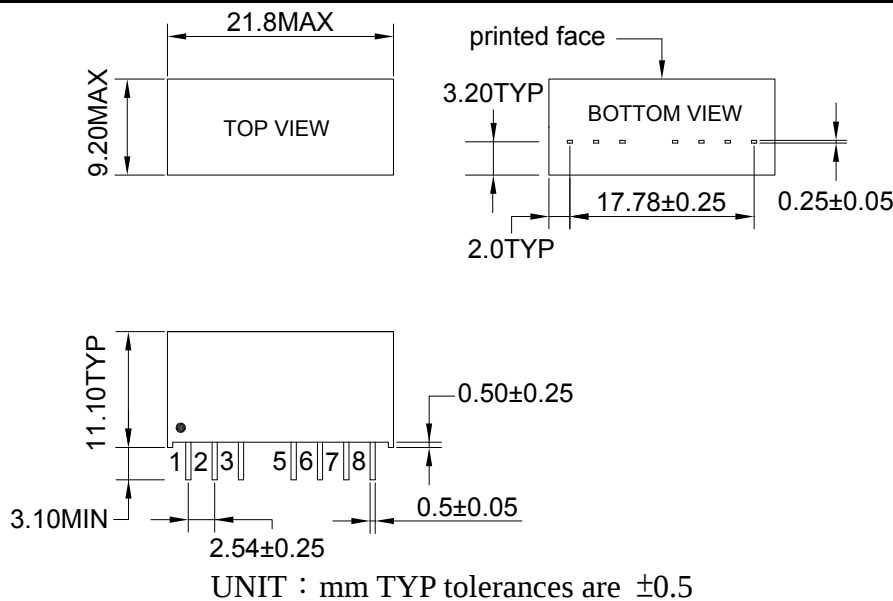
A:Series
B:Input Voltage
C:Single(S)
D:Output Voltage
E:Regulated(R)
F:RoHS Version

Recommended Test Circuit



Markings and Dimensions

Packaging



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

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