

Yuan Dean Scientific CO.,LTD 27D-3KV Single SERIES

2Watt Single Output Regulated 3000Vdc Isolation Dc-Dc Converter



FEATURES:

- 2:1 Wide Input Voltages Range
- High Efficiency up to 80%
- 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-05S05R3KV	5-9	5	400	65
27D-05S09R3KV	5-9	9	222	70
27D-05S12R3KV	5-9	12	167	70
27D-05S15R3KV	5-9	15	133	70
27D-05S24R3KV	5-9	24	84	70
27D-12S05R3KV	9-18	5	400	70
27D-12S09R3KV	9-18	9	222	80
27D-12S12R3KV	9-18	12	167	80
27D-12S15R3KV	9-18	15	133	80
27D-12S24R3KV	9-18	24	84	80
27D-24S05R3KV	18-36	5	400	75
27D-24S09R3KV	18-36	9	222	80
27D-24S12R3KV	18-36	12	167	80
27D-24S15R3KV	18-36	15	133	80
27D-24S24R3KV	18-36	24	84	80
27D-48S05R3KV	36-72	5	400	70
27D-48S09R3KV	36-72	9	222	80
27D-48S12R3KV	36-72	12	167	80
27D-48S15R3KV	36-72	15	133	80
27D-48S24R3KV	36-72	24	84	80

Input Specifications

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

Output Specifications

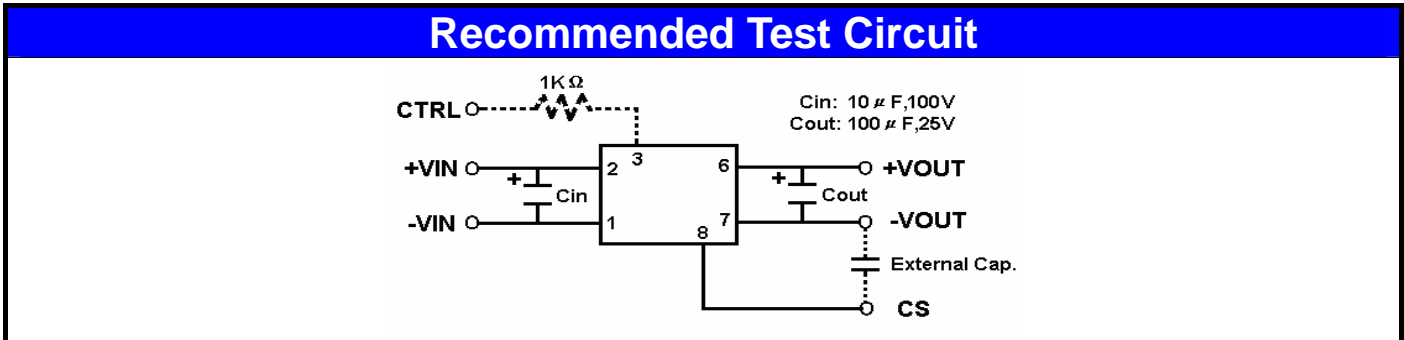
Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance	100% full load			±3	%
Short Circuit Protection	Continuous				
Line Regulation	Regulated			±0.5	%
Load Regulation	Regulated			±0.8	%
Ripple & Noise	Output:5-9V TYPES BW=DC To 20MHz			100	mVp-p
Ripple & Noise	Output:12-24V TYPES BW=DC To 20MHz			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

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Temperature Derating Graph	Part Number
	<p>27D - 05 S 05 R 3KV A B C D E F</p> <p>A:Series B:Input Voltage C:Single Output D:Output Voltage E:Regulated(R) F:Isolation Voltage</p>



Markings and Dimensions	Packaging												
<p>UNIT : mm TYP tolerances are ± 0.5</p>	<p>UNIT:mm</p> <table border="1" style="margin-top: 10px;"> <thead> <tr> <th colspan="4">Size(mm)</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>12.0</td> <td>28.55</td> <td>550</td> <td>6.00</td> </tr> </tbody> </table>	Size(mm)				A	B	C	D	12.0	28.55	550	6.00
Size(mm)													
A	B	C	D										
12.0	28.55	550	6.00										

PIN Connection

PIN	1	2	3	6	7	8
Single	-Vin	+Vin	Ctrl-Control input can (can be left open)	+Vout	-Vout	NC