



3 Watt 5PIN PACKAGE Dc-Dc Converter



FEATURES:

- UP TO 3 WATT OUTPUT POWER
- 500Vdc ISOLATION
- PI INPUT FILTER.
- LOW RIPPLE AND NOISE.
- REGULATED OUTPUT TYPES.
- MTBF:>1,500,000 hrs
- Operating Temperature:-40°C TO +85°C



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
70D-05S05RNL	5	5	600	60
70D-05S12RNL	5	12	250	65
70D-05D12RNL	5	±12	±125	65
70D-12S12RNL	12	12	250	65
70D-12S15RNL	12	15	200	65
70D-12D15RNL	12	±15	±100	65
70D-24S05RNL	24	5	600	60
70D-24D12RNL	24	±12	±125	65
70D-24D15RNL	24	±15	±100	65
70D-48S12RNL	48	12	250	65
70D-48D12RNL	48	±12	±125	65
70D-48D15RNL	48	±15	±100	65

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Types				±10	%
Filter	Capacitor				

Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance				±5	%
Short Circuit Protection	Continuous				
Line Regulation	Regulated			±0.3	%
Load Regulation	Regulated			±0.5	%
Ripple & Noise	BW=DC To 20MHz			50	mVp-p
Line Regulation	Unregulated (For 1% of Vin)		±1.2		%
Load Regulation	Unregulated (20% To 100% F.L)			±10	%
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			20		KHz
Operating Temperature		-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	DAP				
Weight			55		g
Dimensions			33.0x33.0x10.1		mm



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Temperature Derating Graph	Part Number
	<p>70D - 05 S 05 R NL A B C D E F</p> <p>A:Series B:Input Voltage C:Single(S)Dual(D) D:Output Voltage E:Regulated(R) F:RoHS Version</p>

Recommended Test Circuit	
<p>5V :Cin 4.7uF,25V 12V :Cin 2.2uF,25V 24V :Cin 1uF,50V 48V :Cin 1uF,100V</p> <p>5V :Cout 4.7uF,25V 12V:Cout 1uF,25V 15V:Cout 0.47uF,50V</p>	<p>5V :Cin 4.7uF,25V 12V:Cin 2.2uF,25V 24V:Cin 1uF,50V 48V :Cin 1uF,100V</p> <p>12V:Cout 1uF,25V 15V:Cout 0.47uF,50V</p>

Markings and dimensions	Packaging									
	<table border="1" style="margin-top: 10px;"> <thead> <tr> <th colspan="3">Size(mm)</th> </tr> <tr> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>210.00</td> <td>210.00</td> <td>30.00</td> </tr> </tbody> </table>	Size(mm)			A	B	C	210.00	210.00	30.00
Size(mm)										
A	B	C								
210.00	210.00	30.00								

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

PIN Connection					
PIN	1	2	3	4	5
SINGLE	+Vin	-Vin	NO PIN	+Vout	-Vout
DUAL	+Vin	-Vin	+Vout	COM	-Vout