



Non-Isolated Single Output Dc-Dc Converter



FEATURES:

- 3PIN SIP Package
- Pin-out compatible with LM78XX Linear
- UL94V-0 Package Material
- Operating Temperature: -40°C TO +85°C
- Efficiency up to 96%, Non isolated, no need for heatsink
- Short circuit protection
- Wide input voltage ranges 4.75~36VDC



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

Part Number	Input Range	Output Voltage	Output Current	Efficiency	
	Vdc	Vdc	mA	Min.Vin(%)	Max.Vin(%)
01D-1R8-2A	4.75-36	1.8	2000	89	80
01D-2R5-2A	4.75-36	2.5	2000	91	83
01D-3R3-2A	4.75-36	3.3	2000	90	86
01D-05-2A	6.5-36	5.0	2000	92	89
01D-6R5-2A	9.0-36	6.5	2000	93	91
01D-09-2A	12-36	9.0	2000	94	92
01D-12-2A	15-36	12	2000	95	93
01D-15-2A	18-36	15	2000	96	94

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Input Voltage Range	See table	4.75	24	36	V
Internal Input Filter	Capacitors		10		uF
No Load Input Current	Vin=24V		15	20	mA

Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance			±2	±3	%
Short Circuit Protection	Hiccup, automatic recovery				
Line Regulation	Vin=min to max at full load		±0.5		%
Load Regulation	10% To 100% F.L		±0.5		%
Current Limit	Duty=40%		325		%
Ripple & Noise (without Output Capacitor)	100% F.L BW=20MHz			100	mVp-p
Transient response setting time	50% load step change		350		us
Capacitive load	ESR > 1mohm		470	1000	uF

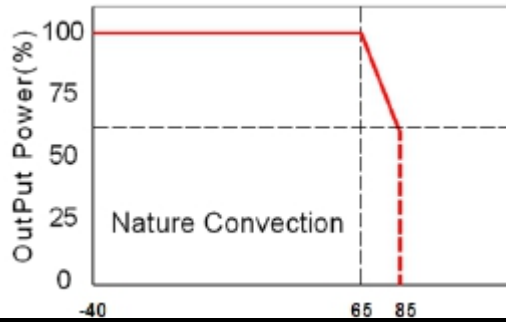
General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Temperature Coefficient	-40°C ~ +85°C ambient			0.015	%/°C
Switching Frequency			500		KHz
Operating Temperature	With derating	-40		85	°C
Storage Temperature		-55		125	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	Non-Conductive Black Plastic				
Weight			4.0		g
Dimensions			11.5x8.5x17.5		mm
MTBF(+25°C)	using MIL-HDBK 217F		1630x10 ³		hours

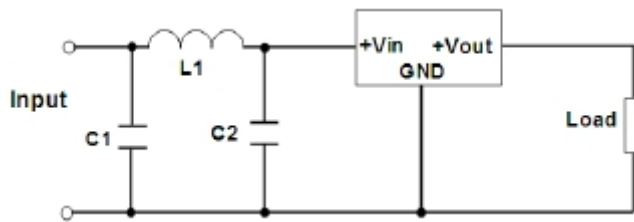


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Temperature Derating Graph



Application Examples Part Number



C1,C2=220uF/50V , ESR<0.1 ohm, L1=1uH

01D - 05 - 2A

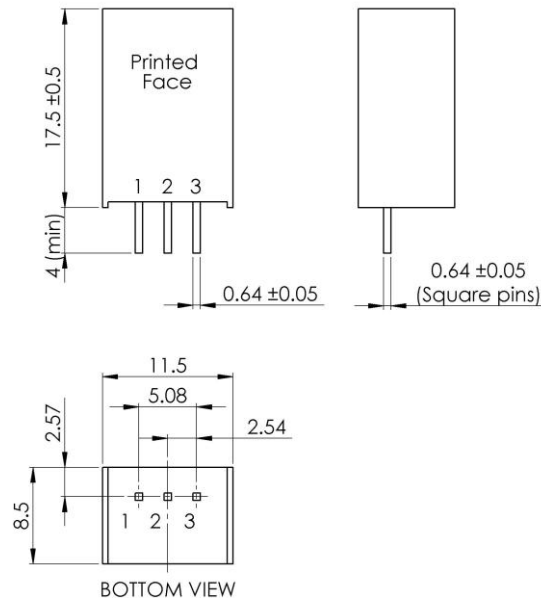
A B C

A: Series

B: Output Voltage

C: Output Current

Markings and Dimensions



Unit : mm
Tolerance : XX.X±0.5 , XX.XX±0.25

PIN Assignment

PIN	1	2	3
Function	+Vin	GND	+Vout