



## 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



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-1R2-1A	4.6-36	1.2	1000	74	62
01D-1R5-1A	4.6-36	1.5	1000	78	65
01D-1R8-1A	4.6-36	1.8	1000	82	69
01D-2R5-1A	4.6-36	2.5	1000	87	75
01D-3R3-1A	4.75-36	3.3	1000	91	78
01D-05-1A	6.5-36	5.0	1000	92	84
01D-6R5-1A	9.0-36	6.5	1000	93	87
01D-09-1A	12-36	9.0	1000	95	90
01D-12-1A	15-36	12	1000	95	92
01D-15-1A	18-36	15	1000	96	94

## Output Specifications

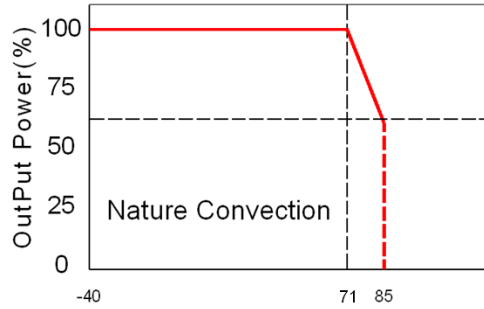
Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance				±2	%
Short Circuit Protection	Hiccup, automatic recovery				
Line Regulation	1.2V to 1.5V			0.3	%
Line Regulation	1.8V to 15V			0.3	%
Load Regulation	1.2V to 1.5V (10% To 100% F.L.)			0.6	%
Load Regulation	1.8 V to 15V (10% To 100% F.L.)			0.4	%
Ripple & Noise (without Output Capacitor)	1.2V to 6.5V(BW=DC To 20MHz)			50	mVp-p
	9V to 15V(BW=DC To 20MHz)			75	mVp-p
Transient response setting time	50% load step change		250		us
Capacitive load				470	uF

## General Specifications

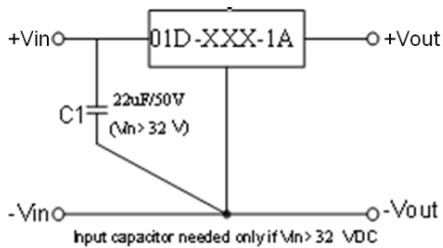
Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency			500		KHz
Operating Temperature	With derating	-40		85	°C
Storage Temperature		-55		125	°C
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	Non-Conductive Black Plastic				
Weight			2.0		g
Dimensions			11.6x7.6x10.4		mm
MTBF(+25°C)	using MIL-HDBK 217F		5000x10 <sup>3</sup>		hours
MTBF(+71°C)	using MIL-HDBK 217F		1000x10 <sup>3</sup>		hours

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**Temperature Derating Graph**



**Application Examples** **Part Number**



01D - 05 - 1A

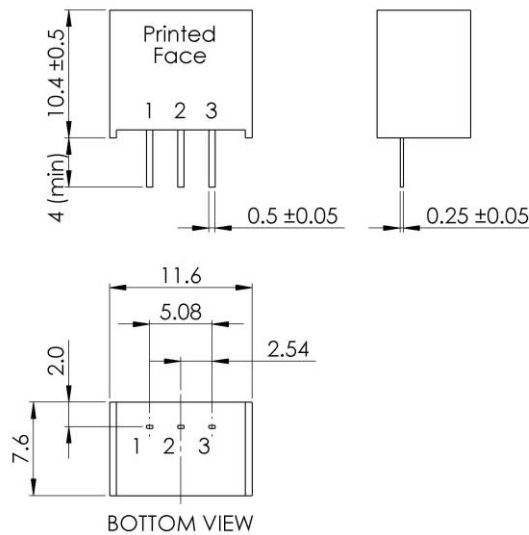
A B C

A: Series

B: Output Voltage

C: Output Current

**Markings and Dimensions**



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

<b>PIN Assignment</b>			
PIN	1	2	3
Function	+Vin	GND	+Vout