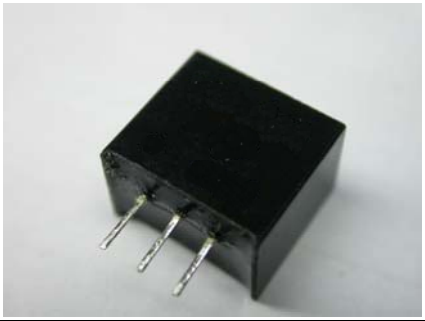
SCHMID-M

S01D-1A SERIES

Non-Isolated Single Output DC-DC Converter



FEATURES:

- 3PIN SIP Package
- Pin-out compatible with LM78XX Linears
- UL94V-0 Package Material
- Operating Temperature:-40℃ TO +85℃
- Efficiency up to 96%,Non isolated,no need for heatsinks
- Short circuit protection

1 Year Warranty SCHMID-M

RoHS SCHMID-M

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(%)
S01D-1R2-1A	4.6-36	1.2	1000	74	62
S01D-1R5-1A	4.6-36	1.5	1000	78	65
S01D-1R8-1A	4.6-36	1.8	1000	82	69
S01D-2R5-1A	4.6-36	2.5	1000	87	75
S01D-3R3-1A	4.75-36	3.3	1000	91	78
S01D-05-1A	6.5-36	5.0	1000	92	84
S01D-6R5-1A	9.0-36	6.5	1000	93	87
S01D-09-1A	12-36	9.0	1000	95	90
S01D-12-1A	15-36	12	1000	95	92
S01D-15-1A	18-36	15	1000	96	94

Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance				±2	%
Short Circuit Protection	Continuous, 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		-40		85	℃
Storage Temperature		-55		125	℃
Humidity	Non Condensing			95	%
Cooling	Free air Convection				
Case material	Non-Conductive Black Plastic				
Weight			2.0		g
Dimensions		11.5x7.5x10.0			mm
MTBF(+25℃)	using MIL-HDBK 217F	$5000x10^3$			hours
MTBF(+71℃)	using MIL-HDBK 217F	$1000x10^3$			hours

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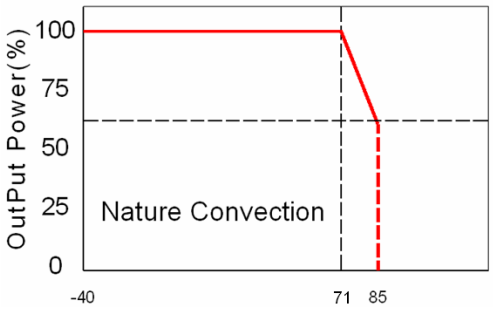
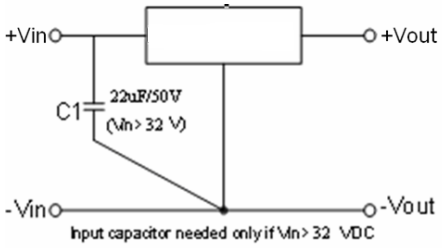
Temperature Derating Graph



Application Examples

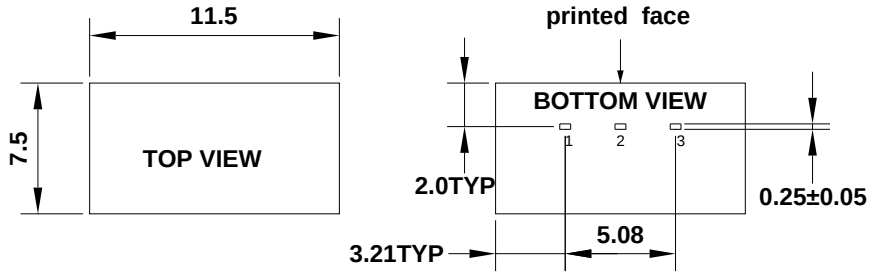


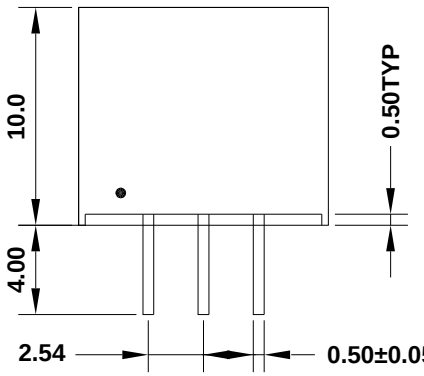
Part Number

S01D – 05 – 1A
A B C

A: Series
B: Output Voltage
C: Output Current

Markings and Dimensions





UNIT:mm
XX.X±0.5
XX.XX±0.25

PIN Connection

PIN	1	2	3
SINGLE	+Vin	GND	+Vout