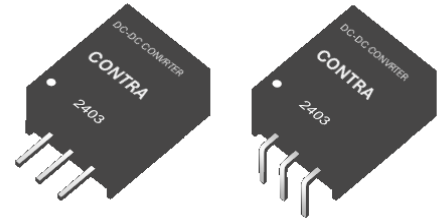


C01DC2-1A SERIES Non-Isolated DC-DC Converter Single Output



FEATURES :

- 3PIN SIP Package
- Pin-out compatible with LM78XX Linear
- Efficiency up to 95%, Non isolated, no need for heatsinks
- UL94V-0 package material
- Operating temperature from -40°C to +85°C
- No-load input current as low as 0.1mA
- Short circuit protection



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



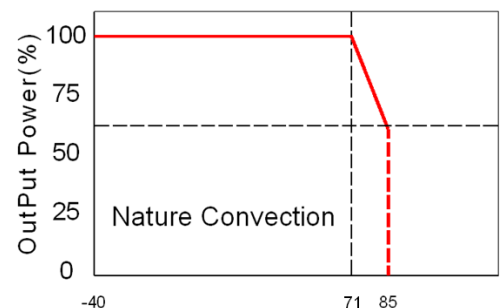
Part Number	Input Range	Output Voltage	Output Current	Efficiency (%)		Capacitive Load
	Vdc	Vdc	mA	Min. Vin	Max. Vin	µF max
C01DC2-3R3-1A(L)	4.75-36	3.3	1000	90	81	680
C01DC2-05-1A(L)	6.5-36	5.0	1000	93	86	680
	6.5-27	-5.0	-500	86	82	330
C01DC2-6R5-1A(L)	9.0-36	6.5	1000	93	86	680
C01DC2-09-1A(L)	12-36	9.0	1000	95	90	680
C01DC2-12-1A(L)	15-36	12	1000	96	93	470
	8-20	-12	-300	89	88	330
C01DC2-15-1A(L)	18-36	15	1000	95	93	470
	8-18	-15	-300	89	89	330

Note: (L) Add a suffix to bend the feet 90°C , e.g. C01DC2-05-1AL

Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance			2	±3	%
Short Circuit Protection	Continuous, automatic recovery				
Line Regulation	Full load, input voltage range		±0.2	±0.5	%
Load Regulation	Nominal input, 10% -100% load		±0.3	±0.6	%
Ripple & Noise (without Output Capacitor)	(BW=DC To 20MHz)			75	mVp-p
Transient response setting time	50% load step change		250		us

Temperature Derating Graph



C01DC2-1A SERIES Non-Isolated DC-DC Converter Single Output



Electromagnetic Compatibility (EMC)

EMI	CE	CISPR32/EN55032 CLASS B (see Fig. 1 for recommended circuit)		
	RE	CISPR32/EN55032 CLASS B (see Fig. 1 for recommended circuit)		
EMS	ESD	IEC/EN61000-4-2	Contact $\pm 4\text{kV}$	perf. Criteria B
	RS	IEC/EN 61000-4-3	10V/m	perf. Criteria A
	EFT	IEC/EN 61000-4-4	$\pm 1\text{kV}$	perf. Criteria B
	Surge	IEC/EN 61000-4-5	line to line $\pm 1\text{kV}$	perf. Criteria B
	CS	IEC/EN 61000-4-6	3Vr.m.s	perf. Criteria A

Part Number

$\frac{\text{C01DC2}}{\text{A}} - \frac{\text{05}}{\text{B}} - \frac{\text{1A}}{\text{C}}$

A: Series

B: Output Voltage

C: Output Current

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency			440		KHz
Operating Temperature		-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		11.50x8.50x17.50			mm
		19.00x11.50x8.50			mm
MTBF(+25°C)	using MIL-HDBK 217F	5000x10 ³			hours
MTBF(+71°C)	using MIL-HDBK 217F	1000x10 ³			hours

EMC (CLASS B) Compliance Circuit

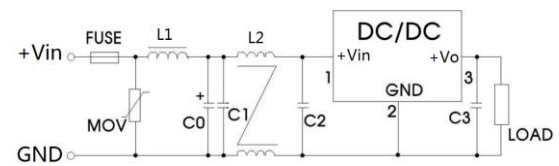
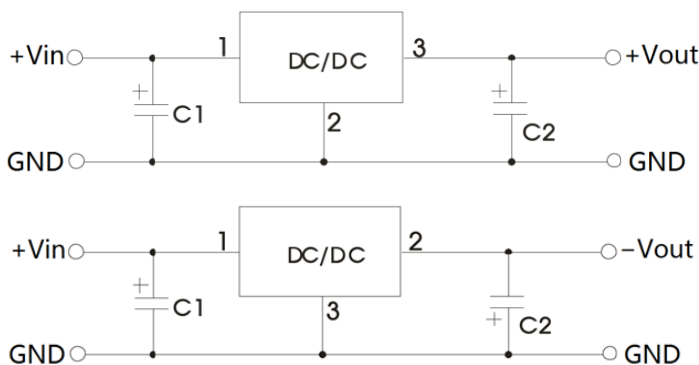


Fig.1

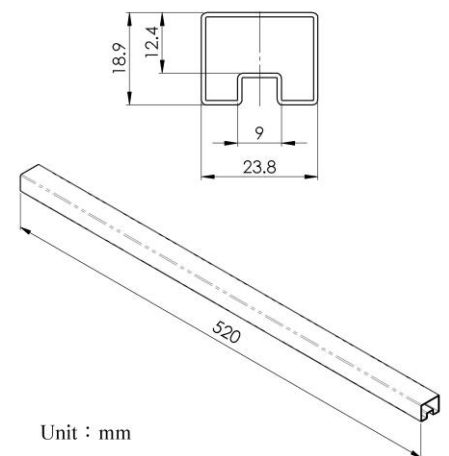
FUSE	Select fuse value according to actual input current
MOV	S20K30
L1	82μH
C0	680μF /50V
L2	4.7mH
C1, C3, C4	4.7μF /50V
C2	10μF /50V

Recommended Test Circuit



Vout	C1	C2
3.3	10μF/50V	22μF/10V
5		22μF/10V
6.5		22μF/16V
9		22μF/16V
12		22μF/25V
15		22μF/25V

Packing Formation



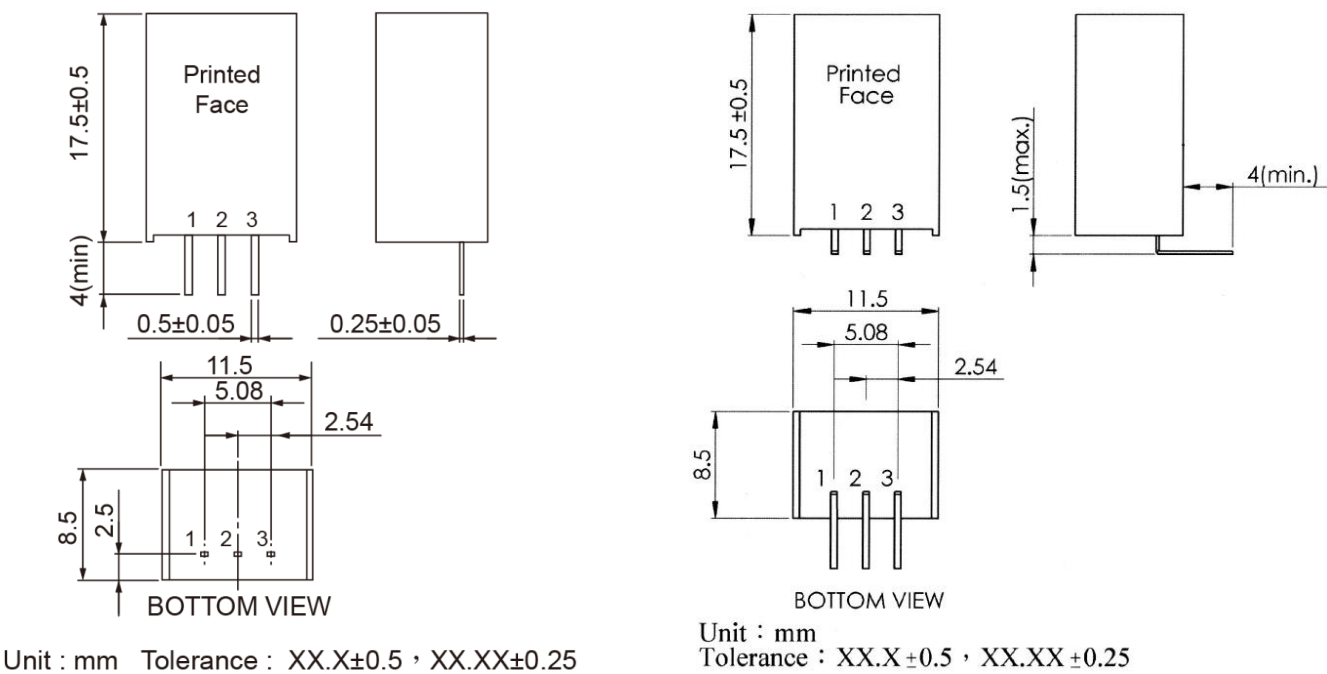
Unit : mm

Weight	:	4.0 grams/pcs
Tube	:	42 pcs

C01DC2-1A SERIES Non-Isolated
DC-DC Converter Single Output



Markings and Dimensions



PIN Connection

PIN	1	2	3
SINGLE	+Vin	GND	+Vout