



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
- Low Profile (L*W*H = 11.5 * 8.5 * 17.5mm)
- Short circuit protection, Thermal Shutdown
- Wide input voltage ranges, up to 72V



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	
				Min.Vin(%)	Max.Vin(%)
08D-3R3-500	9 ~ 72	3.3	500	81	72
08D-05-500	9 ~ 72	5.0	500	87	80
08D-6R5-500	9 ~ 72	6.5	500	91	80
08D-09-500	14~ 72	9.0	500	92	85
08D-12-500	17 ~ 72	12	500	94	88
08D-15-500	21 ~ 72	15	500	94	90
08D-24-300	36 ~ 72	24	300	96	92

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Input Voltage Range	See table	9	48	72	V
Internal Input Filter	Capacitors			2.2	uF
No Load Input Current	Vin=48V	1	5	7	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		±0.3	±0.5	%
Load Regulation	10% To 100% F.L		±0.4	±0.5	%
Ripple & Noise (without Output Capacitor)	10% TO 100% F.L BW=20MHz			60	mVp-p
Transient response setting time	50% load step change		350	500	us
Capacitive load				100	uF

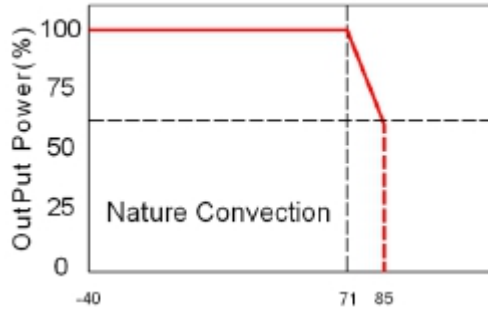
General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Temperature Coefficient	-40°C ~ +85°C ambient			0.015	%/°C
Switching Frequency		150		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				
Potting Material		Epoxy(UL94V-0)			
Weight			4.0		g
Dimensions		11.5x8.5x17.5			mm
MTBF(+25°C)	using MIL-HDBK 217F	7395x10 ³			hours

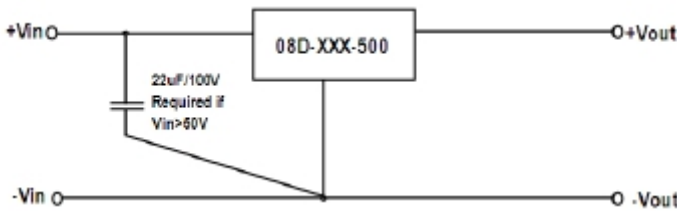


Non-Isolated Single Output Dc-Dc Converter

Temperature Derating Graph



Application Examples Part Number



08D - 05 - 500

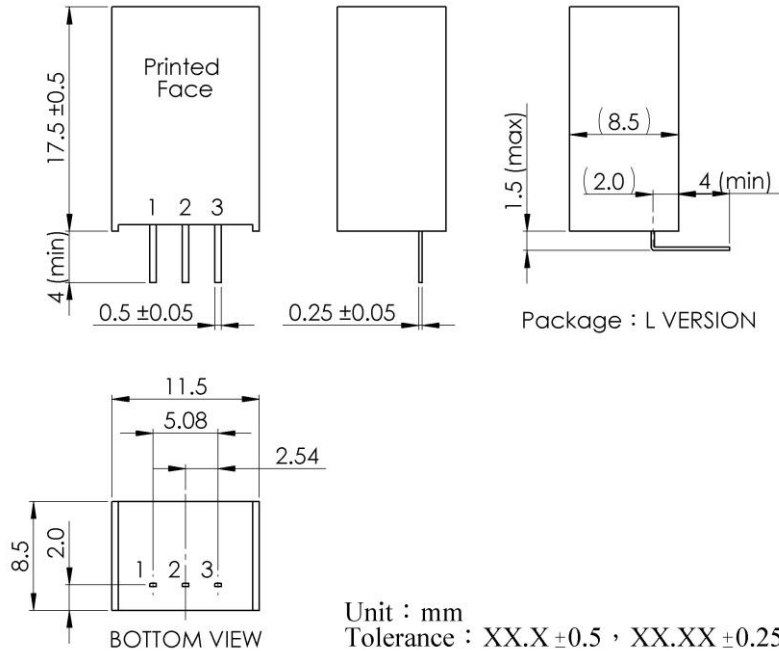
A B C

A: Series

B: Output Voltage

C: Output Current

Markings and Dimensions



PIN Assignment

PIN	1	2	3
Function	+Vin	GND	+Vout