

FEATURES :

- 3PIN SIP Package
- Pin-out compatible with LM78XX Linear
- Efficiency up to 97%,Non isolated, no need for heatsink
- Customized Solutions Available
- UL94V-0 Package Material
- Operating Temperature From -40°C To +85°C
- 3 Years Warranty
- Short circuit protection, Thermal Shutdown

YUAN DEAN SCIENTIFIC



DC-DC Converter

01D-500 SERIES

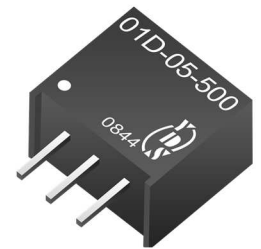
Non-Isolated

Single Output

0.45"*0.3"*0.4"

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

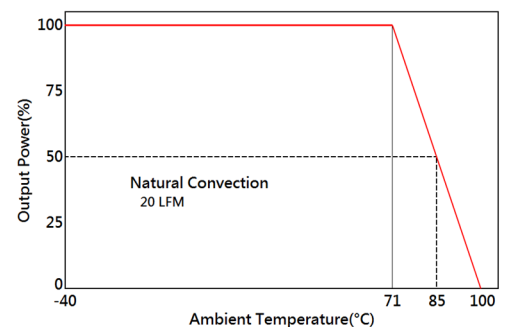
Part Number	Input Range	Output Voltage	Output Current	Efficiency	
	Vdc	Vdc	mA	Min.Vin(%)	Max.Vin(%)
01D-1R5-500	4.75-30	1.5	500	73	63
01D-1R8-500	4.75-34	1.8	500	82	71
01D-2R5-500	4.75-34	2.5	500	87	77
01D-3R3-500	4.75-34	3.3	500	91	81
01D-05-500	6.5-34	5.0	500	94	86
01D-6R5-500	8.0-34	6.5	500	95	88
01D-09-500	11-34	9.0	500	96	92
01D-12-500	15-34	12	500	97	94
01D-15-500	18-34	15	500	97	95



Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Voltage Tolerance				±3	%
Short Circuit Protection	Hiccup, automatic recovery				
Line Regulation	1.5V to 6.5V			0.4	%
	9V to 15.5V			0.2	%
Load Regulation	1.5V to 6.5V (10% To 100% F.L)			0.6	%
	9V to 15.5V (10% To 100% F.L)			0.4	%
Ripple & Noise (without Output Capacitor)	1.5V to 6.5V (BW=DC To 20MHz)			30	mVp-p
	9V to 15.5V (BW=DC To 20MHz)			40	mVp-p
Transient response setting time	25% load step change		350		us

Temperature Derating Graph



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TEL : 886-6-3842899 FAX : 886-6-3843288

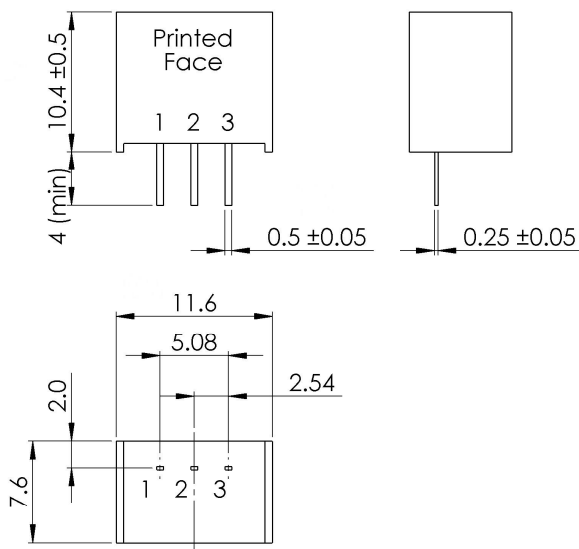
E-MAIL : ydsweb@yds.com.tw

Rev:0 2018/10/31

General Specifications

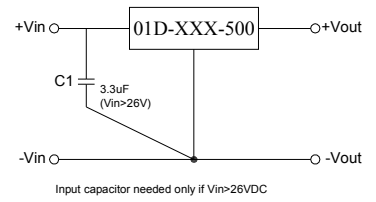
Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency			330		KHz
Operating Temperature	With derating	-40		85	°C
Humidity	Non Condensing			95	%
Cooling	Natural Convection (20LFM)				
Case material	Non-Conductive Black Plastic				
Weight			2.0		g
Dimensions		11.6x7.6x10.4			mm
MTBF(+25°C)	using MIL-HDBK 217F	21098x10 ³			hours
MTBF(+71°C)	using MIL-HDBK 217F	4212x10 ³			hours

Dimensions



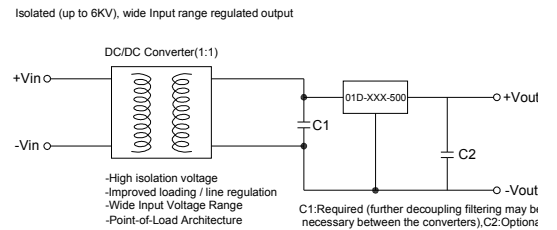
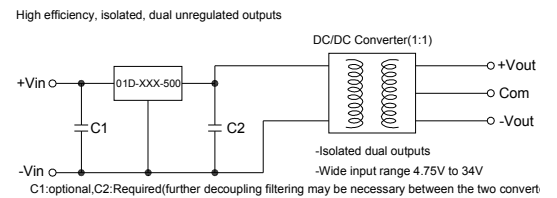
Unit : mm
Tolerance : XX.X ± 0.5 , XX.XX ± 0.25

Application Examples



Input capacitor needed only if Vin > 26VDC
Add a blocking diode to Vout if current can flow backwards into the output, as this can damage the converter when it is powered down.
See Application Examples for details.

Application Examples



Part Number

01D - 05 - 500
A B C

A:Series
B:Output Voltage
C:Output Current

PIN Assignment

PIN	1	2	3
Function	+Vin	GND	+Vout