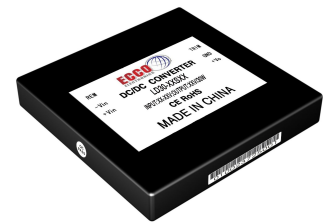


50W DC/DC converter

Typical Performance

- ⊙Wide Input voltage range (2:1)
- ⊙Typical Efficiency:85%
- ⊙Switching frequency: 300KHz ± 30 KHz
- ⊙Short Circuit Protection,Self-furbish
- ⊙Input-output isolate 1500VDC
- ⊙PCB Board in-line type installs
- ⊙Metal Case



Technology parameter Test condition:General Nominal Line,Tc=25℃, Rated resistant load unless other wispecified

Input Feature	Min	Nom	Max	Notes
Input voltage(Vdc)	9(start voltage 9.5V)	12	18	W 2:1
	18	24	36	W 2:1
	36	48	72	W 2:1
	72	110	145	W 2:1
REMOTE(ON/OFF)	ON		Open Circuit or High level(8~+Vin)	
	OFF		Connect to FG or Low level(0~0.4V)	

Output Feature

Voltage accuracy		Vo1;Vo2,Vo3	±1.0%, ±3.0%
Line regulation	Nominal Load,full voltage input range	Vo1;Vo2,Vo3	±0.2%, ±1.5%
Load regulation	Nominal Input Voltage,20% ~ 100% Nominal Load	Vo1;Vo2,Vo3	±0.5%, ±3.0%
Ripple and noise	20MHz BM full load Vo≤5.0V, ≤50mVp-p; Vo≥48V, ≤180mVp-p; Other, ≤100mVp-p;test by 20M oscillograph		
Voltage adjust	Standard output voltage	TRIM	±10%(adjustable)
Peak Deviation	25% Rated Load Vary	ΔVo1/ Vo1	±5.0%
Dynamic Response Setting Time			≤200us

General Feature

Efficiency	Normal input , full load	80% typical
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Switching frequency			300KHz typical
Operating temperature	Free air	Industrial level	-25℃ ~ +55℃
Storage temperature			-40℃ ~ +105℃
Max case temperature			+90℃
Relative humidity			10%~90%
case material			Metal case
Isolation Voltage	Input-Output		1000VDC
	Input-Case		500VDC
	Output-Case		500VDC
Insulation Resistance			10MΩ
Temperature Coefficient			≤±0.02%/℃
Cooling			Natural Convection
MTBF	2X10 ⁵ Hrs		

NOTE:

(1)The module working environment temperature more than 55 ℃ need derating use (- 0.15W/℃), but the max shell temperature shall not be more than 90 ℃.

(2)Capacitive load:

The output of the module can be applied electrolytic capacitor, but too much capacity and low ESR may cause the module instability, or cause current limiting point become low,we recommend 100 u F/A of the output capacitance , the current is rated output current.

Product Nomination Method

example	L D 25 - 48 S 05 E						
	①	②	③	④	⑤	⑥	⑦
①	Wide voltage input: 2: 1				⑥	output voltage	
②	Power adaptation mode: D (DC-DC)				⑦		
③	Output power(W)					G:input-output Isolate	
④	Normal input voltage					E:package	
⑤	S=Single route output, D=Dual route output, T=Triple route output, Q=Quadruple output						

Product Program

PART #	Input voltage range	Output voltage / current					
		VO1		VO2		VO3	
		V	A	V	A	V	A
LD50-12S05E	12V(9~18V)	5V	10A				
LD50-12S12E		12V	4.17A				

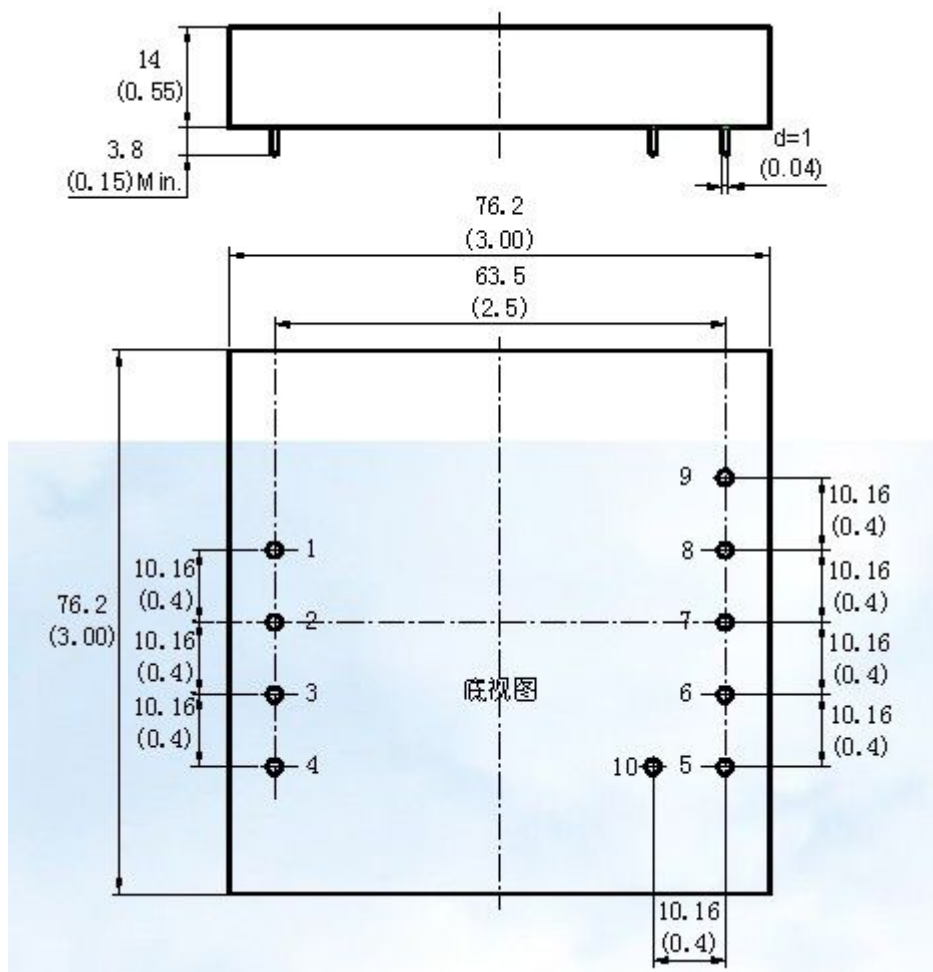
LD50-12S15E		15V	3.33A				
LD50-12S24E		24V	2A				
LD50-12D05E		+5V	5A	-5V	5A		
LD50-12D12E		+12V	2A	-12V	2A		
LD50-24S05E	24V(18~36V)	5V	10A				
LD50-24S12E		12V	4.17A				
LD50-24S15E		15V	3.33A				
LD50-24S24E		24V	2A				
LD50-24D05E		+5V	5A	-5V	5A		
LD50-24D12E		+12V	2A	-12V	2A		
LD50-48S05E	48V(36~72V)	5V	10A				
LD50-48S12E		12V	4.17A				
LD50-48S15E		15V	3.33A				
LD50-48S24E		24V	2A				
LD50-48D05E		+5V	5A	-5V	5A		
LD50-48D12E		+12V	2A	-12V	2A		
LD50-110S05E	110V(72~144V)	5V	10A				
LD50-110S12E		12V	4.17A				
LD50-110S15E		15V	3.33A				
LD50-110S24E		24V	2A				
LD50-110D05E		+5V	5A	-5V	5A		
LD50-110D12E		+12V	2A	-12V	2A		

***NOTE:**

(1) This series, if the nominal input is 12V, the module does not support long time short circuit protection, short time should be controlled within 20 S.

(2) The output ripple noise (peak value) measurement, please reference module test instructions.

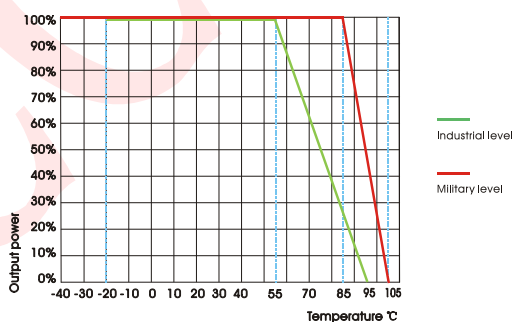
Mechanical Dimension



BOTTOM VIEW

UNIT:mm(inch)

Temperature Curve



Mechanical Data

WATT	L x W x H	Packing No.
50W	76.20*76.20*12.70mm(3*3*0.5inch)	E

Pin Assignment

PIN	1	2	3	4	5	6	7	8	9	10
Single O/P	-Vin	+Vin	NP	REM	TRIM	Vo1	GND	NC	NC	NP
Dual O/P	-Vin	+Vin	NP	REM	TRIM	+Vo1	COM	-Vo2	NC	NP

*Note: The power modules such as the definition of the pin does not match with the hand book, please refer to the actual item.

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