

Typical Performance

**FEATURES**

- Wide Input voltage range (2:1、4:1)
- 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



3-Years Product Warranty

**Technology parameter** Test condition:General Nominal Line,Tc=25°C , Rated resistant load unless other wisespecified

Input Feature	Min	Nom	Max	Notes
Input voltage(Vdc)	9(start violtage 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
	9(start violtage 9.5V)	18	36	W 4:1
	18	36	72	W 4:1
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
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		1500VDC
	Input-Case		1500VDC
	Output-Case		500VDC
Insulation Resistance			10MΩ
Temperature Coefficient			≤±0.02%/℃
Cooling			Natural Convection
MTBF	2X10 <sup>5</sup> 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 I						
	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				I: Dual Route output Isolate		
⑤	S=Single route output, D=Dual route output, T=Triple route output, Q=Quadruple output				W: Super Wide input voltage		

## Product Program

PART #	Input voltage range	Output voltage / current					
		VO1		VO2		VO3	
		V	mA	V	mA	V	mA

LD30-12S05D	12 V (9~18V)	5V	6000mA				
LD30-12S12D		12V	2500mA				
LD30-12S15D		15V	2000mA				
LD30-12S18D		18V	1667mA				
LD30-12S24D		24V	1250mA				
LD30-12S28D		28V	1071mA				
LD30-12S48D		48V	625mA				
LD30-12D05D		+5V	3000mA	-5V	3000mA		
LD30-12D12D		+12V	1250mA	-12V	1250mA		
LD30-18S05D		18V (9~36V)	5V	6000mA			
LD30-18S12D	12V		2500mA				
LD30-18S15D	15V		2000mA				
LD30-18S18D	18V		1667mA				
LD30-18S24D	24V		1250mA				
LD30-18S28D	28V		1071mA				
LD30-18S48D	48V		625mA				
LD30-18D05D	+5V		3000mA	-5V	3000mA		
LD30-18D12D	+12V		1250mA	-12V	1250mA		
LD30-24S05D	24V (18~36V)		5V	6000mA			
LD30-24S12D		12V	2500mA				
LD30-24S15D		15V	2000mA				
LD30-24S18D		18V	1667mA				
LD30-24S24D		24V	1250mA				
LD30-24S28D		28V	1071mA				
LD30-24S48D		48V	625mA				
LD30-24D05D		+5V	3000mA	-5V	3000mA		
LD30-24D12D		+12V	1250mA	-12V	1250mA		
LD30-36S05D		36V (18~72V)	5V	6000mA			
LD30-36S12D	12V		2500mA				
LD30-36S15D	15V		2000mA				
LD30-36S18D	18V		1667mA				
LD30-36S24D	24V		1250mA				

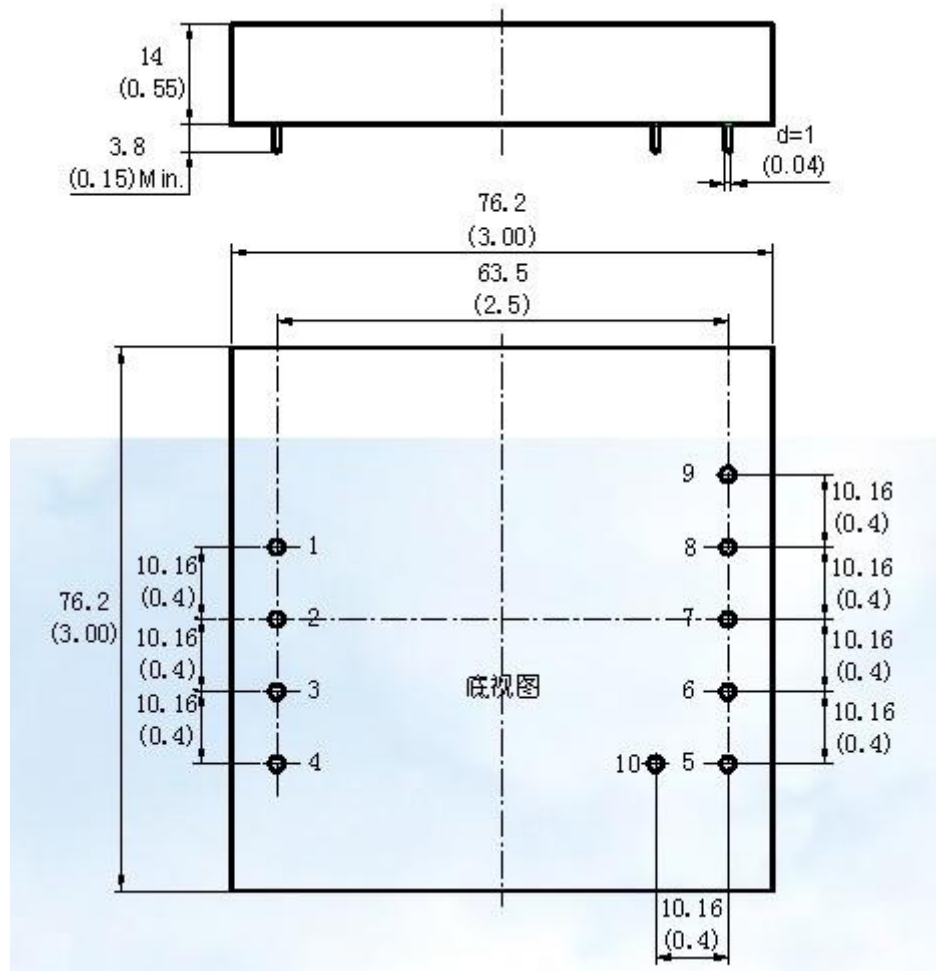
LD30-36S28D		28V	1071mA					
LD30-36S48D		48V	625mA					
LD30-36D05D		+5V	3000mA	-5V	3000mA			
LD30-36D12D		+12V	1250mA	-12V	1250mA			
LD30-48S05D	48V (36~72V)	5V	6000mA					
LD30-48S12D		12V	2500mA					
LD30-48S15D		15V	2000mA					
LD30-48S18D		18V	1667mA					
LD30-48S24D		24V	1250mA					
LD30-48S28D		28V	1071mA					
LD30-48S48D		48V	625mA					
LD30-48D05D		+5V	3000mA	-5V	3000mA			
LD30-48D12D		+12V	1250mA	-12V	1250mA			
LD30-110S05D		110V (72~144V)	5V	6000mA				
LD30-110S12D			12V	2500mA				
LD30-110S15D			15V	2000mA				
LD30-110S18D	18V		1667mA					
LD30-110S24D	24V		1250mA					
LD30-110S28D	28V		1071mA					
LD30-110S48D	48V		625mA					
LD30-110D05D	+5V		3000mA	-5V	3000mA			
LD30-110D12D	+12V		1250mA	-12V	1250mA			

**\*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.

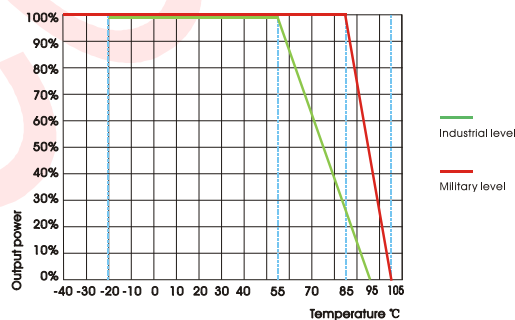
### **Mechanical Dimension**



BOTTOM VIEW

UNIT:mm(inch)

### Temperature Curve



### Mechanical Data

WATT	L x W x H	Packing No.
30W	76.20*76.20*12.70mm(3*3*0.5inch)	D

### 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
Triple O/P	-Vin	+Vin	NP	REM	TRIM	+Vo1	COM	-Vo2	Vo3	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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