

Typical Performance

FEATURES

- Wide Input voltage range (2:1/4:1)
- Typical Efficiency:85%
- Switching frequency: 300KHz
- Output Over current protect,Short circuit protection
- input under voltage protection,over voltage protection
- input-output isolated
- PCB Board in-line type installs
- High reliability
- Optional heat sink



3-Years Product Warranty

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

Input Features	Min	Nom	Max	Notes
	Test condition			
Start voltage	12V(9~18V)			9V
	18V(9~36V)			10V
	24V(18~36V)			18V
	36V(18~72V)			18V
	48V(36~72V)			36V
	110V(65~150V)			65V
	300V(200~400V)			200V
Input under voltage protection	12V(9~18V)			8V
	18V(9~36V)			8V
	24V(18~36V)			17V
	36V(18~72V)			17V
	48V(36~72V)			35V
	110V(65~150V)			64V

	300V(200~400V)			199V
Input voltage (Vdc)	9	12	18V	W 2:1
	9	18	36	W 4:1
	18	24	36	W 2:1
	18	36	72	W 4:1
	36	48	72	W 2:1
	65	110	150	W 2:1
	200	300	400	W 2:1
Start time	Not capacitive load			20mS

Remote On/Off Function

CTL	CNT Pin connect -Vin		OFF
	CNT Pin left open		ON

Output Feature

	Test condition		
Voltage accuracy	$I_o=0.1...1.0 \times I_{onom}, V_i=V_{rated}$		$\pm 1.0\%$
Line regulation	$V_{imin} \leq V_i \leq V_{imax}$		$\pm 0.2\%$
Load regulation	$I_o=0.1...1.0 \times I_{onom}, V_{imin} \leq V_i \leq V_{imax}, V_i=V_{rated}$		$\pm 0.5\%$
Ripple&noise	2-MHz Broadband		1%
Over current protection	$V_{imin} \leq V_i \leq V_{imax}$		120%
Peak Deviation	25% Rated Load Vary		$\pm 5.0\%$
Dynamic Response Setting Time			400us
Output Voltage Trim	$V_{imin} \leq V_i \leq V_{imax}$		10%
Switching frequency	$V_{imin} \leq V_i \leq V_{imax}$		300KHz

General Feature

	Test condition		
Efficiency			85% typical
Board temperature	Industry level		$-25^\circ\text{C} \sim +55^\circ\text{C}$
Working environment temperature	Military level		$-25^\circ\text{C} \sim +85^\circ\text{C}$
Max Board temperature	Industry level		$+85^\circ\text{C}$

	Military level		+105°C
Storage temperature	Industry level		-40°C ~ +105°C
	Military level		-50°C ~ +105°C
Relative humidity	No condensation		5%~90%RH
Temperature coefficient			±0.02%/°C
case material			aluminium baseplate
Isolated resistance	Input-Output		100M ohm
Vibration resistance	10~55Hz		5G
Over current mode	Full input range	Protection type : Hiccup mode, recovers automatically	
Cooling		Heatsink,nature cooling	
Case material		epoxy,Aluminum base plate	
Isolated Voltage	Input-output 1500Vdc; input-FG 1500Vdc,Output-FG 500Vdc		
MTBF	MIL-HDBK-217F2		5X10 ⁶ Hrs

Product Nomination Method

example	L D 200 - G 48 S 12		
	① ② ③	④ ⑤	⑥ ⑦
①	Wide input voltage: 2: 1	④	G:1/4 brick package
②	Power adaptation mode: D (DC-DC)	⑤	Normal input voltage
③	Output power(W)	⑥	S=Single route output
⑦	output voltage		

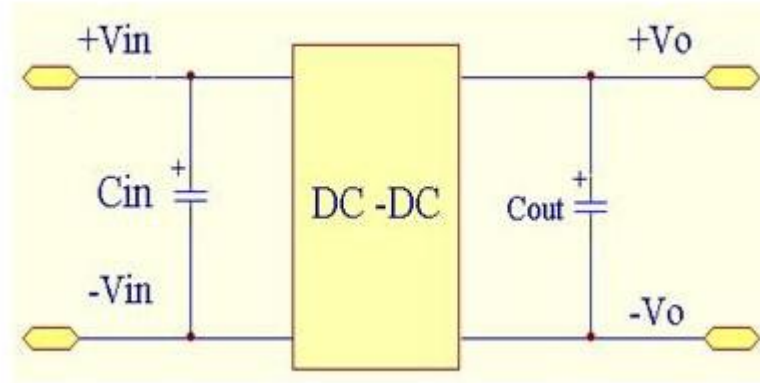
Product Program

PART #	Input voltage range	Output voltage / current					
		VO1		VO2		VO3	
		V	A	V	A	V	A
LD50G-12S05	12V(9-18V)	5V	10A				
LD50G-12S12		12V	4.1A				
LD50G-12S15		15V	3.3A				
LD50G-12S24		24V	2A				
LD50G-12S28		28V	1.7A				
LD50G-12S48		48V	1A				
LD50G-18S05	18V(9-36V)	5V	10A				
LD50G-18S12		12V	4.1A				

LD50G-18S15		15V	3.3A				
LD50G-18S24		24V	2A				
LD50G-18S28		28V	1.7A				
LD50G-18S48		48V	1A				
LD50G-24S3V3	24V(18-36V)	3.3V	15.15A				
LD50G-24S05		5V	10A				
LD50G-24S12		12V	4.1A				
LD50G-24S15		15V	3.3A				
LD50G-24S24		24V	2A				
LD50G-24S28		28V	1.7A				
LD50G-24S48		48V	1A				
LD50G-36S05	36V(18-72V)	5V	10A				
LD50G-36S12		12V	4.1A				
LD50G-36S15		15V	3.3A				
LD50G-36S24		24V	2A				
LD50G-36S28		28V	1.7A				
LD50G-36S48		48V	1A				
LD50G-48S3V3	48V(36-72V)	3.3V	15A				
LD50G-48S05		5V	10A				
LD50G-48S12		12V	4.1A				
LD50G-48S15		15V	3.3A				
LD50G-48S24		24V	2A				
LD50G-48S28		28V	1.7A				
LD50G-48S48		48V	1A				
LD50G-110S05	110V(65~150V)	5V	10A				
LD50G-110S12		12V	4.1A				
LD50G-110S15		15V	3.3A				
LD50G-110S24		24V	2A				
LD50G-110S28		28V	1.7A				
LD50G-110S48		48V	1A				
LD50G-300S05	300V(200~400V)	5V	10A				
LD50G-300S12		12V	4.1A				
LD50G-300S15		15V	3.3A				
LD50G-300S24		24V	2A				

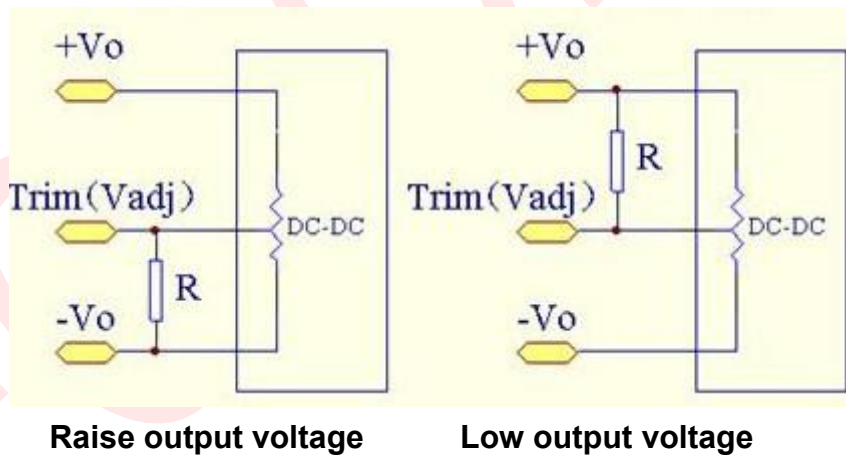
LD50G-300S28		28V	1.7A			
LD50G-300S48		48V	1A			

Recommended Circuit

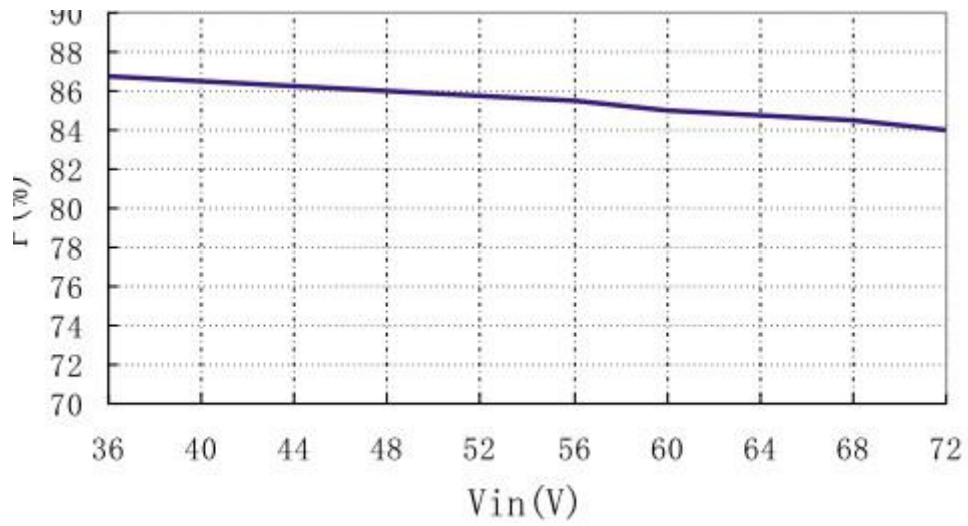


- (1) Power module with Cin is helpful to improve the electromagnetic compatibility, it is recommended to use 47 μF ~100 μF electrolytic capacitor
- (2) Power module with Cout is helpful to lower the output ripple
- (3) Power module output connects the digital circuit needs to add Cout
- (4) Cout is recommended to use 100 $\mu\text{F}/\text{A}$, the current is refers to the output current

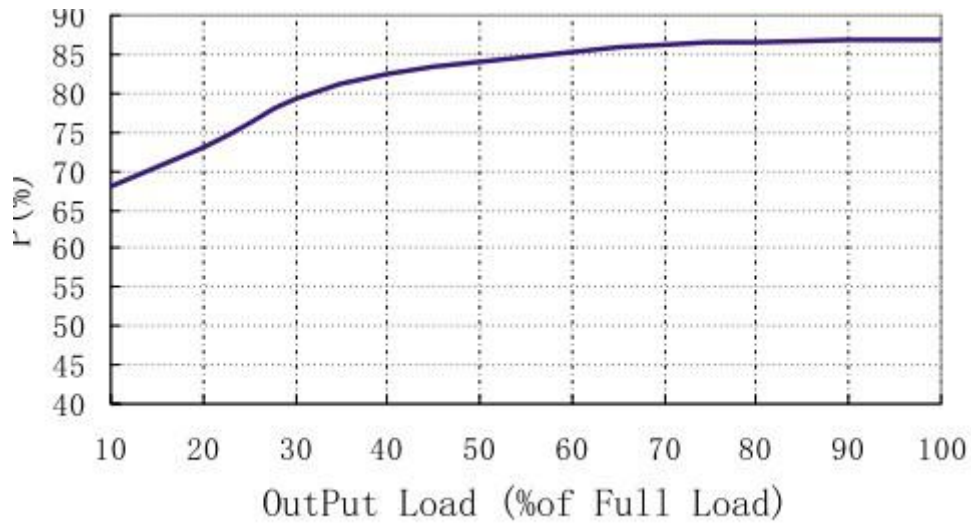
TRIM



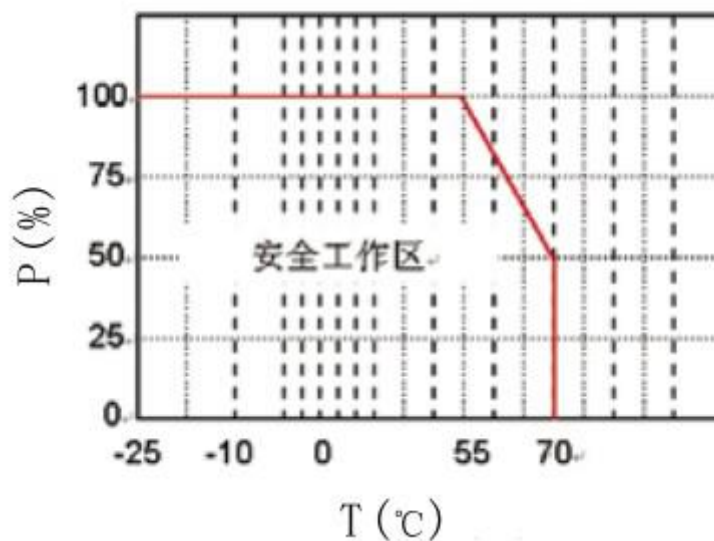
Input voltage--Efficiency



Output Load--Efficiency

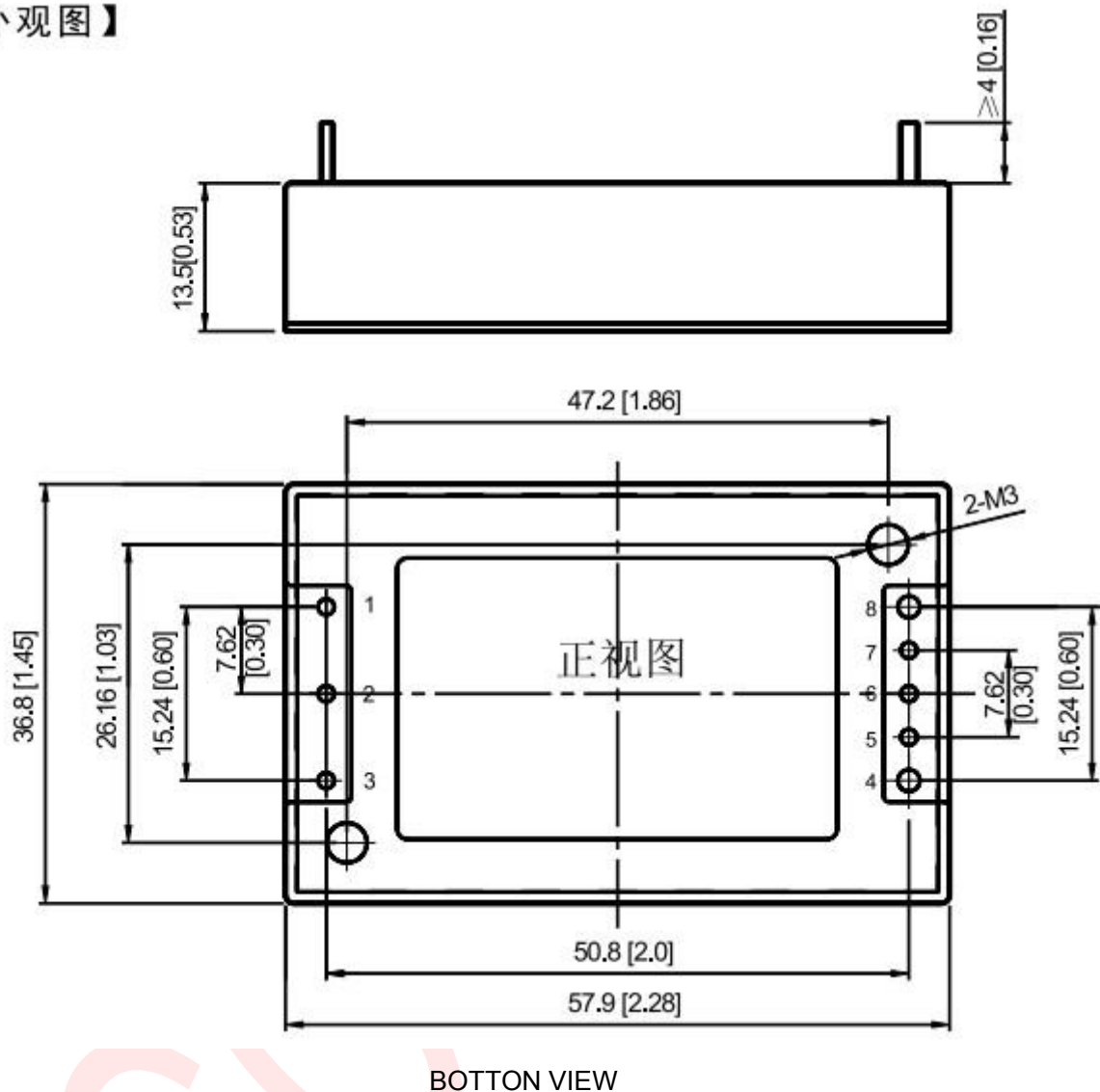


Temperature Curve



Mechanical Dimension

【外观图】



Unit:mm(inch)

Tolerance:±0.2mm(±0.008inch)

Mechanical Data

WATT	L x W x H	Packing No.
50W	57.9*36.8*12.7mm	

Pin Assignment

Pin	1	2	3	4	5	6	7	8		
Single O/P	-Vin	CTL	+Vin	+Vo	+S	TRIM	-S	-Vo		

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