

500W DC-DC converter(full brick)



Typical Performance

- ⊙Wide Input voltage range (2:1)
- ⊙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

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	24V(18~36Vin)			18V
	48V(36~72Vin)			36V
Input under voltage protection	24V(18~36Vin)			17V
	48V(36~72Vin)			35V
Input voltage (Vdc)	18	24	36	
	36	48	72	
	72	110	144	
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	$I_o=0.1...1.0 \times I_{nom}, V_i=V_{rated}$		±1.0%
Line regulation	$V_{min} \leq V_i \leq V_{max}$		±0.2%
Load regulation	$I_o=0.1...1.0 \times I_{nom}, V_{min} \leq V_i \leq V_{max}, V_i=V_{rated}$		±0.5%
Ripple&noise	2-MHz Broadband		1%
Over current protection	$V_{min} \leq V_i \leq V_{max}$		120%
Peak Deviation	25% Rated Load Vary		±5.0%
Dynamic Response Setting Time			400us
Output Voltage Trim	$V_{min} \leq V_i \leq V_{max}$		10%
Switching frequency	$V_{min} \leq V_i \leq V_{max}$		300KHz

General Feature

	Test condition		
Efficiency			85% typical
Board temperature	Industry level		-25°C ~ +55°C
Working environment temperature	Military level		-25°C ~ +85°C
Max Board temperature	Industry level		+85°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

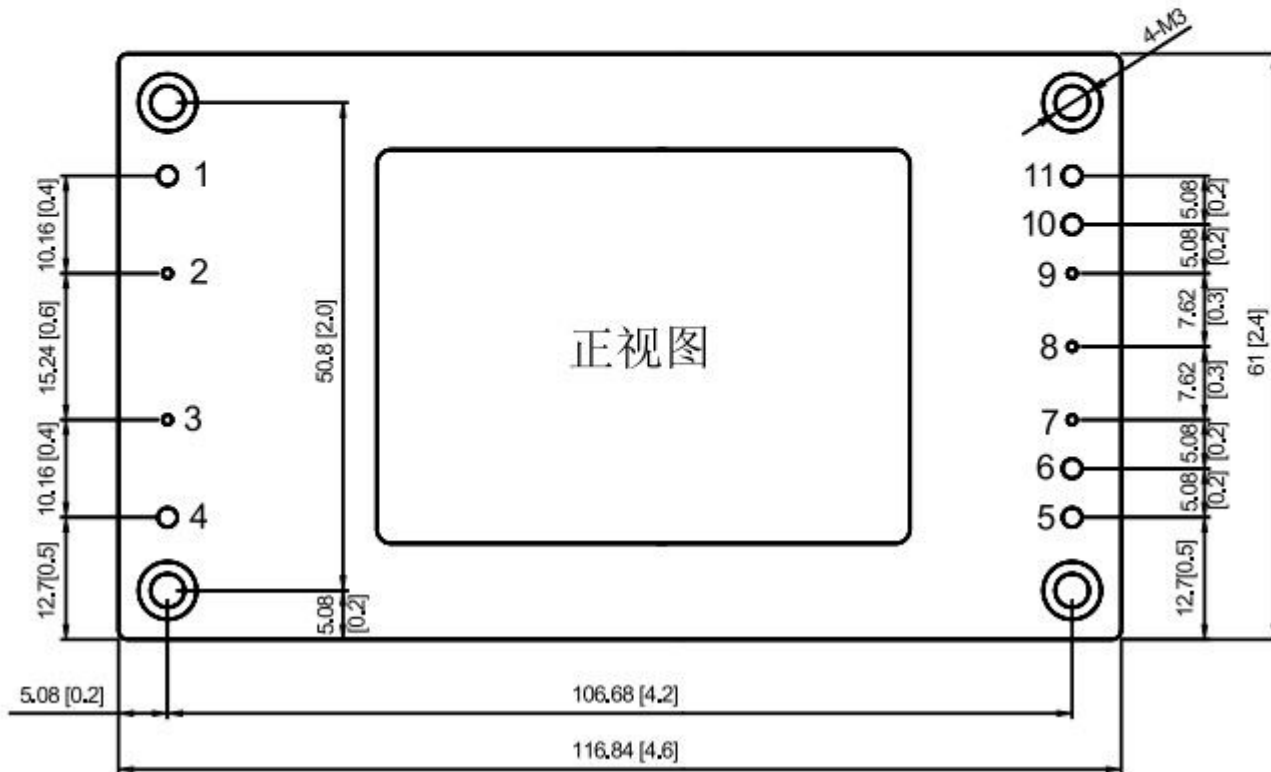
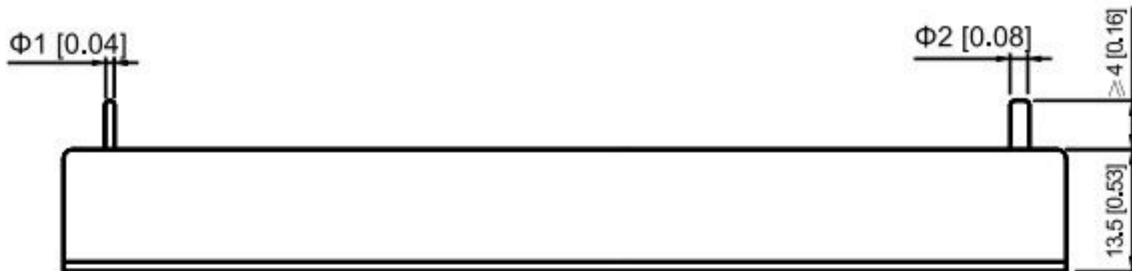
example	L D 200 – T 48 S 12						
	①	②	③	④	⑤	⑥	⑦

①	Wide input voltage: 2: 1	④	T:full 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
LD500T-24S12	24 V(18~36V)	12	41.7				
LD500T-24S15		15	33.3				
LD500T-24S24		24	20.8				
LD500T-24S28		28	17.9				
LD500T-24S36		36	13.9				
LD500T-24S48		48	10.4				
LD500T-48S12	48V(36~72V)	12	41.7				
LD500T-48S15		15	33.3				
LD500T-48S24		24	20.8				
LD500T-48S28		28	17.9				
LD500T-48S36		36	13.9				
LD500T-48S48		48	10.4				

Mechanical Dimension



BOTTOM VIEW

Unit:mm(inch)

Tolerance:±0.2mm(±0.008inch)

Mechanical Data

WATT	L x W x H	Packing No.
500W	116.84*61*13.5mm	

Pin Assignment

Pin	1	2	3	4	5	6	7	8	9	10	11
Single O/P	-Vin	CASE	REM	+Vin	+Vout	+Vout	+S	TRIM	-S	-Vout	-Vout

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