

Typical Performance

FEATURES

- Wide Input voltage range (2:1、4:1)
- Typical Efficiency:95%
- Switching frequency: 300KHz ± 30 KHz
- Overcurrent/Short circuit protection,Self-furbish
- Input-output isolate 1500VDC
- PCB Board in-line type installs



3-Years Product Warranty

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

Input Feature	Min	Nom	Max	Notes
Input voltage(Vdc)	9	12	18	W 2:1
	18	24	36	W 2:1
	9	18	36	W 4:1
Turn on voltage	3.5Vdc		+Vin	Converter guaranteed on when REM pin is left open
Turn off voltage	0		0.3Vdc	

Under voltage protect

Output Feature

Voltage accuracy		Vo1;Vo2,Vo3	±1.0%, ±2.0%
Line regulation		Vo1;Vo2,Vo3	±0.2%, ±1.5%
Load regulation	20% ~ 100%	Vo1;Vo2,Vo3	±0.5%, ±4.0%
Ripple and noise	20MHz BM Vo≤5.0V, ≤50mVp-p; Vo≥48V, ≤180mVp-p; Other, ≤100mVp-p;		
Dynamic response	25%	ΔVo1/Δt	±4.0/500us%
Voltage adjust	Standard output voltage	TRIM	±10%(adjustable)
Start delay time	typical		≤200mS

General Feature

Efficiency	Normal input , full load	Vo≤5.0V,80% typical	Vo>5.0V, 87% typical
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Switching frequency		300KHz typical	Max 330KHz
Operating temperature	Free air	Industrial level	-25℃ ~ +55℃
Storage temperature			-40℃ ~ +105℃
Max case temperature			+95℃
Relative humidity			10%~90%
case material			Metal case
Isolation Voltage	500Vdc ≤0.5mA/1min, 500Vdc ≤0.5mA/1min		
MTBF	2X10 ⁵ Hrs		

Product Nomination Method

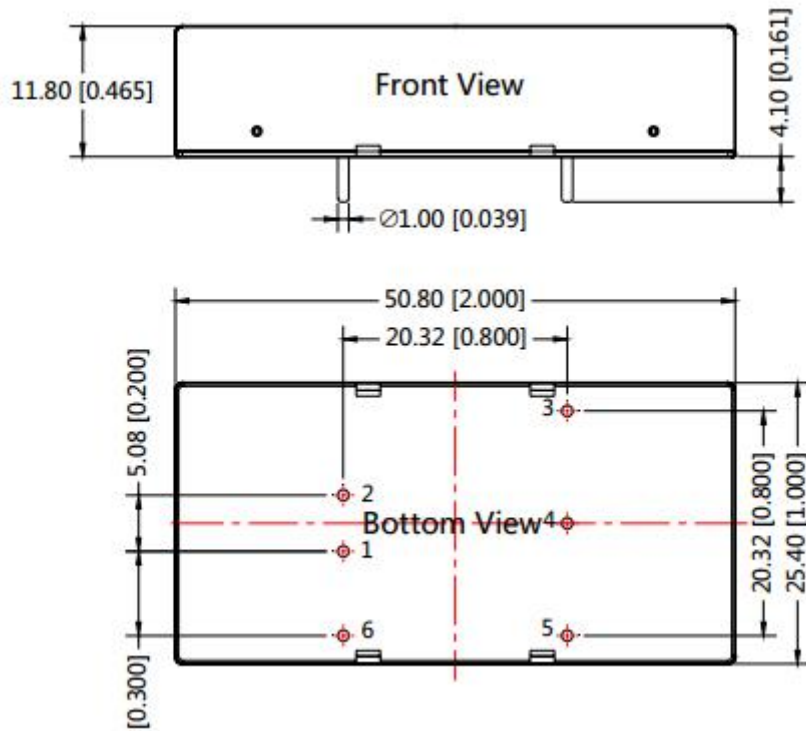
example	L D 20 - 48 S 05 A ① ② ③ ④ ⑤ ⑥ ⑦						
①	Wide input voltage: 2: 1				⑥	output voltage	
②	Power adaptation mode: D (DC-DC)					A:package type	
③	Output power(W)						
④	Normal input voltage				⑦		
⑤	S=Single route output, D=Dual route output, T=Triple route output, Q=Quadruple output						

Product Program

PART #	Input voltage range	Output voltage / current					
		VO1		VO2		VO3	
		V	mA	V	mA	V	mA
LD20-12S05A	12V(9~18V)	5V	4000mA				
LD20-12S12A		12V	1660mA				
LD20-12S15A		15V	1330mA				
LD20-12S24A		24V	830mA				
LD20-18S05A	18V(9~36V)	5V	4000mA				
LD20-18S12A		12V	1660mA				
LD20-18S15A		15V	1330mA				
LD20-18S24A		24V	830mA				
LD20-24S05A	24V (18~36V)	5V	4000mA				
LD20-24S12A		12V	1660mA				
LD20-24S15A		15V	1330mA				
LD20-24S24A		24V	830mA				

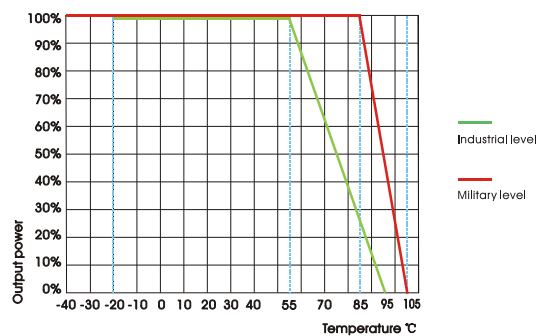
LD20-48S05A	48V(36~72V)	5V	4000mA			
LD20-48S12A		12V	1660mA			
LD20-48S15A		15V	1330mA			

Mechanical Dimension



UNIT:mm(inch)

Temperature Curve



Mechanical Data

WATT	L x W x H	Packing No.
20W	50.80 x 20.40 x 11.80mm(2*1*0.465 inch)	A

Pin Assignment

PIN NO.	1	2	3	4	5	6	7			
Single O/P	GND	Vin	+Vo	TRIM	0V	CTRL				

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

ECCO