

10W DC/DC converter

Typical Performance

- ⊙Wide Input voltage range (2:1)
- ⊙Typical Efficiency:80%
- ⊙Switching frequency: 300KHz
- ⊙Short circuit protection,Self-furbish
- ⊙I/O isolation 1500VDC
- ⊙PCB Board in-line type installs
- ⊙Metal case, Low Output Ripple



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

Input Feature	Min	Nom	Max	Note
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	144	W 2:1
Remote ON/OFF				Non
Under voltage protect				

Output Feature

Voltage accuracy		Vo1,Vo2	±1.0%, ±3.0%
Line regulation	Nominal Load,full voltage input range	Vo1,Vo2	±0.2%, ±1.5%
Load regulation	Nominal Input Voltage,20% ~ 100%	Vo1,Vo2	±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		
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%
Isolation Voltage		Input-Output	1500VDC
		Input-Case	1500VDC
		Output-Case	500VDC
Isolation Resistance			10MΩ
Temperature Coefficient			≤±0.02%/℃
Cooling			Natural Convection
case material			Metal case
MTBF	BELLCORE TR332, (25℃)		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 uF/A of the output capacitance , the current is rated output

Product Nomination Method

exam ple	L D 5 - 48 S 05 I						
	①	②	③	④	⑤	⑥	⑦
①	L:Wide voltage input: 2: 1			⑥	output voltage		
②	Power adaptation mode: D (DC-DC)			⑦	I: Dual Route output Isolate		
③	Output power(W)				W: Super Wide input voltage		
④	Normal input voltage						
⑤	S=Single route output, D=Dual route output, T=Triple route output, Q=Quadruple output						

Product Program

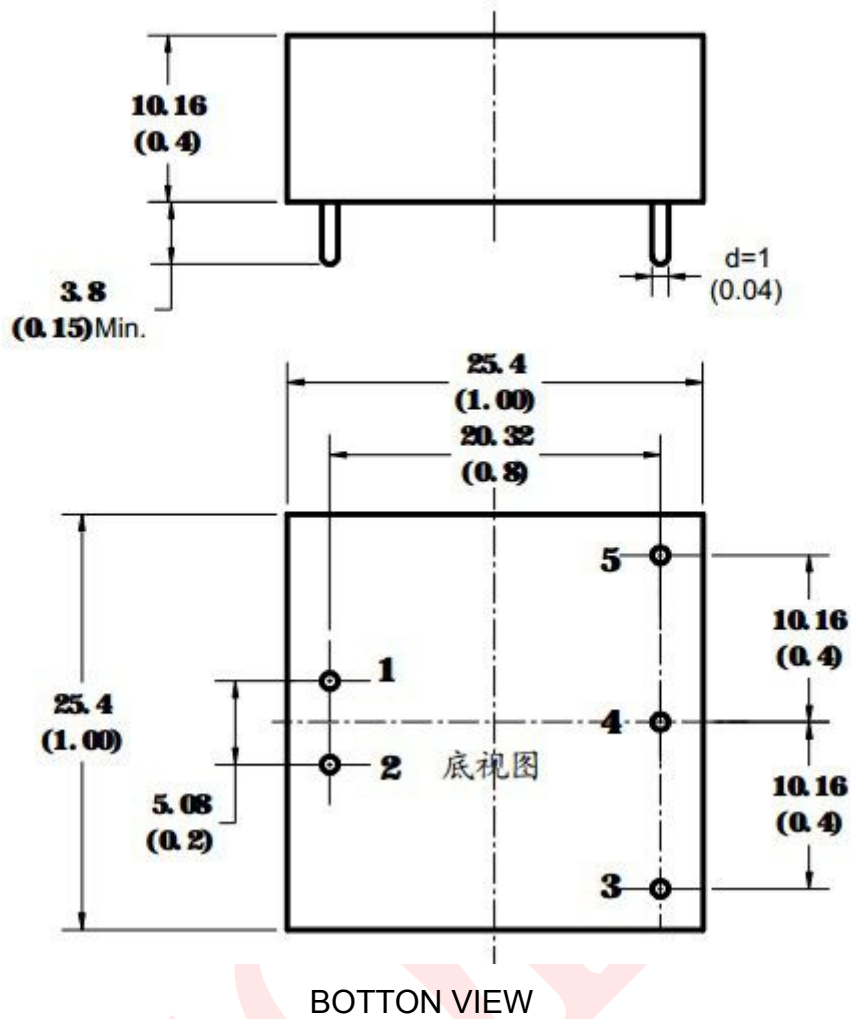
PART #	Input voltage range	Output voltage / current						
		VO1		VO2		VO3		
		V	mA	V	mA	V	mA	
LD10-12S05A	12 V (9~18V)	5V	2000mA					

LD10-12S09A		9V	1110mA					
LD10-12S12A		12V	830mA					
LD10-12S15A		15V	660mA					
LD10-12S24A		24V	410mA					
LD10-12S48A		48V	208mA					
LD10-24S05A	24V (18~36V)	5V	2000mA					
LD10-24S09A		9V	1110mA					
LD10-24S12A		12V	830mA					
LD10-24S15A		15V	660mA					
LD10-24S24A		24V	410mA					
LD10-24S48A		48V	208mA					
LD10-48S05A	48V (36~72V)	5V	2000mA					
LD10-48S09A		9V	1110mA					
LD10-48S12A		12V	830mA					
LD10-48S15A		15V	660mA					
LD10-48S24A		24V	410mA					
LD10-48S48A		48V	208mA					
LD10-110S05A	110V (72~144V)	5V	2000mA					
LD10-110S09A		9V	1110mA					
LD10-110S12A		12V	830mA					
LD10-110S15A		15V	660mA					
LD10-110S24A		24V	410mA					
LD10-110S48A		48V	208mA					

***NOTE:**

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

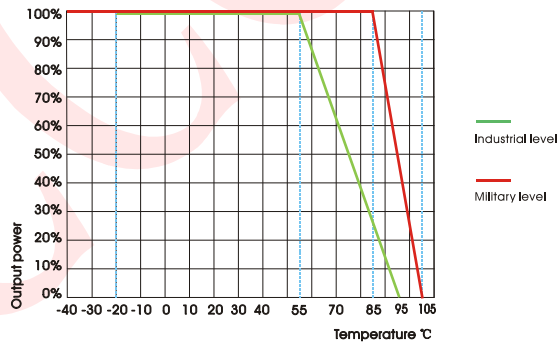
Mechanical Dimension



BOTTON VIEW

UNIT:mm(inch)

Temperature Graph



Mechanical Data

WATT	L x W x H	Packing No.
10W	25.40*25.40*10.16mm(1*1*0.4inch)	A

Pin Assignment

PIN	1	2	3	4	5					
Single O/P	+Vin	-Vin	GND	NP	Vo1					

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

ECCOELEC