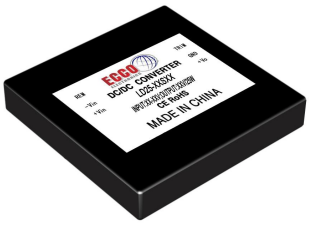
ECCO Electronics Technology Co.,ltd

35W DC/DC converter

Typical Performance

FEATURES

- Wide Input voltage range (2:1/4:1)
- Typical Efficiency:80%
- Switching frequency：300KHz
- Output Short Circuit Protection,Self-furbish,Over Current Protection
- Input-output isolate 1500VDC
- PCB Board in-line type installs
- Metal Case



CE RoHS

3-Years Product Warranty

Technology parameter Test condition:General Nominal Line,Tc=25℃，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	144	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			80% typical
Switching Frequency			300KHz
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
Isolation Resistance			10MΩ
Temperature Coefficient			≤±0.02%/℃
Cooling			Natural Convection
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 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 input voltage：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

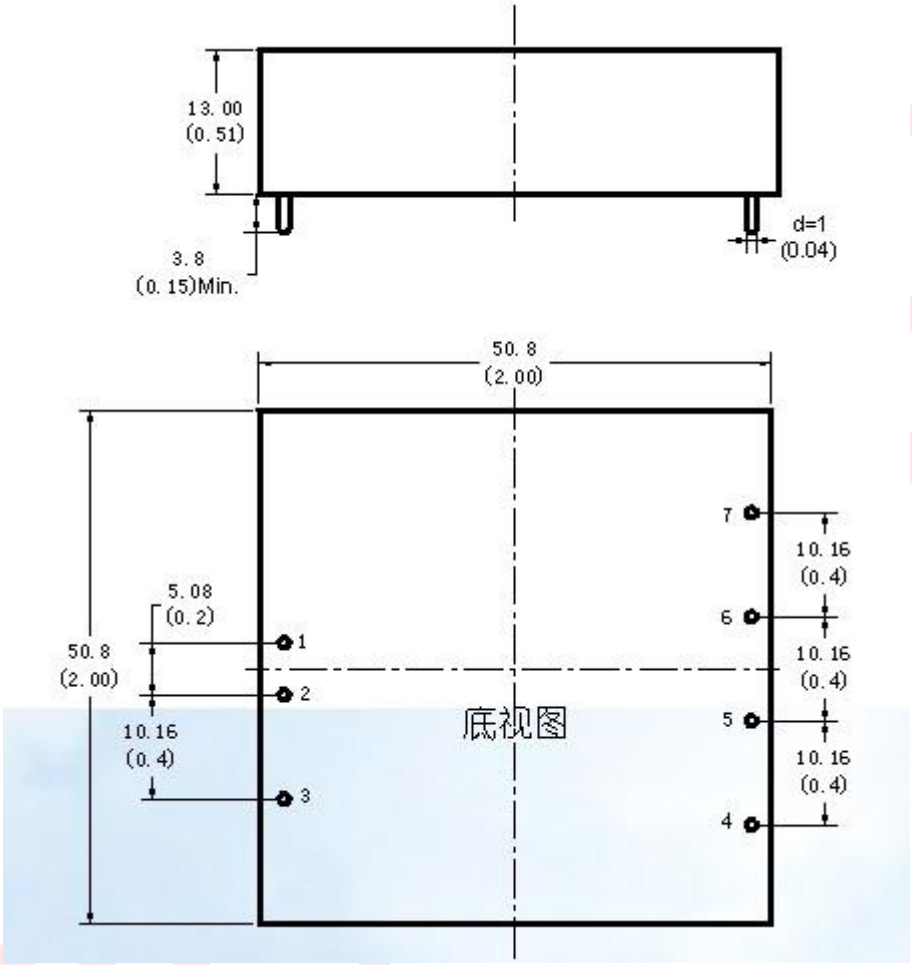
		V	mA	V	mA	V	mA
LD35-12S05E	12V(9~18V)	5V	7000mA				
LD35-12S12E		12V	2900mA				
LD35-12S15E		15V	2333mA				
LD35-12S18E		18V	1944mA				
LD35-12S24E		24V	1458mA				
LD35-12S28E		28V	1250mA				
LD35-12S48E		48V	729mA				
LD35-12S48E		48V	729mA				
LD35-24S05E	24V(18~36V)	5V	7000mA				
LD30-24S12E		12V	2900mA				
LD30-24S15E		15V	2333mA				
LD35-24S18E		18V	1944mA				
LD35-24S24E		24V	1458mA				
LD35-24S28E		28V	1250mA				
LD35-24S48E		48V	729mA				
LD35-48S05E	48V(36~72V)	5V	7000mA				
LD35-48S12E		12V	2900mA				
LD35-48S15E		15V	2333mA				
LD35-48S18E		18V	1944mA				
LD35-48S24E		24V	1458mA				
LD35-48S28E		28V	1250mA				
LD35-48S48E		48V	729mA				
LD35-110S05E	110V(72~144V)	5V	7000mA				
LD35-110S12E		12V	2900mA				
LD35-110S15E		15V	2333mA				
LD35-110S18E		18V	1944mA				
LD35-110S24E		24V	1458mA				
LD35-110S28E		28V	1250mA				
LD35-110S48E		48V	729mA				

*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.

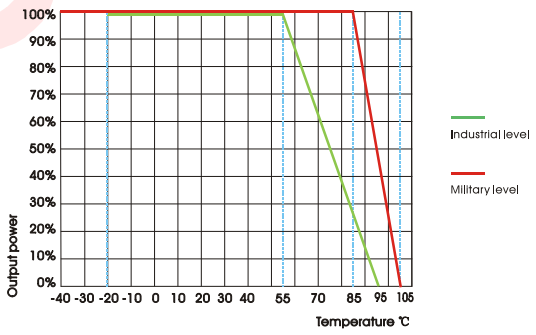
Mechanical Dimension



BOTTON VIEW

UNIT:mm(inch)

Temperature Curve



Mechanical Data

WATT	L x W x H	Packing No.
35W	50.80 x 50.80 x 12.70mm(2*2*0.5inch)	

Pin Assignment										
PIN	1	2	3	4	5	6	7			
Single O/P	+Vin	-Vin	REM	TRIM	GND	Vo1	NP			
Dual O/P	+Vin	-Vin	REM	TRIM	-V02	COM	-Vo1			
Triple O/P	+Vin	-Vin	REM	Vo3	COM	+Vo1	-Vo2			
*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