



ECCO Electronics Technology Co.,Ltd

12W AC/DC converter

Typical Performance				
FEATURES				
<ul style="list-style-type: none"> ■ Wide Input voltage range ■ Typical efficiency : 80% ■ Switching frequency: 60 KHz ■ Overcurrent/Short circuit protection,Self-furbish ■ Input-output isolate ■ PCB board in-line type installs ■ Plastic/Metal case 				  3-Years Product Warranty
Technology parameter Test condition:General Nominal Line, Tc=25°C , Rated resistant load unless other wise specified				
Input feature				
Input voltage (Vac)	Min	Nom	Max	Notes
165(200Vdc)	220	265(380Vdc)	N	
85(120Vdc)	220	265(380Vdc)	W	
Frequency range(HZ)	47		440	
Remote ON/OFF				NONE
Output Feature				
Voltage accuracy		Vo1; Vo2, Vo3;	±1.0%, ±3.0%	
Line regulation	Nominal load,full voltage input range	Vo1; Vo2, Vo3;	±0.2%(3-15W); ±1.5%	
			±0.1%(20-30W); ±1.5%	
Load regulation	Nominal input Voltage,20% ~ 100% Nominal load	Vo1; Vo2, Vo3;	±0.5%; ±3.0%	
Ripple and noise	20MHz BM,test by 20M oscillograph			≤1%Vo
Peak deviation	25% Rated load vary	ΔVo1/ Vo1	≤±5.0%	
Dynamic response setting time			≤200us	
General Feature				
Efficiency			80% typical	
Switching frequency		below 10W: 60 KHz	100KHz	
Operating temperature			-20°C ~ +55°C	
Storage temperature			-40°C ~ +105°C	

Max case temperature			+90°C
Relative humidity			10%~90%
case material			Plastic/Metal case
Isolation voltage		Input-Output	2500Vac/1min
		Input-Case	2500Vac/1min
		Output-Case	500Vac/1min
Temperature coefficient			≤±0.03%/°C
Cooling			Natural Convection
MTBF	BELLCORE TR332, (25°C)		2X10 ⁵ Hrs

NOTE:

(1)The 3-15W module working environment temperature more than 70 °C need derating use (- 0.15W/°C for 3W, - 0.25W/°C for 5W, - 0.5W/°C for 10W, - 0.75W/°C for 15W),the 20-30W more than 55 °C need derating use(- 0.6W/°C for 20W, - 0.86W/°C for 30W), but the max shell temperature shall not be more than 90 °C.

(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 current.

Product Nomination Method

example	L A 25 – 220 S 05 J ① ② ③ ④ ⑤ ⑥ ⑦		
①	Wide input voltage range: AC85-265V Narrow input voltage range: AC165-265V	⑤	S=Single route output, D=Dual route output, T=Triple route output, Q=Quadruple output
②	Power adaptation mode: A (AC-DC)	⑥	output voltage
③	Output power(W)	⑦	I: Dual output isolated
④	Normal input voltage		J:Millitary level

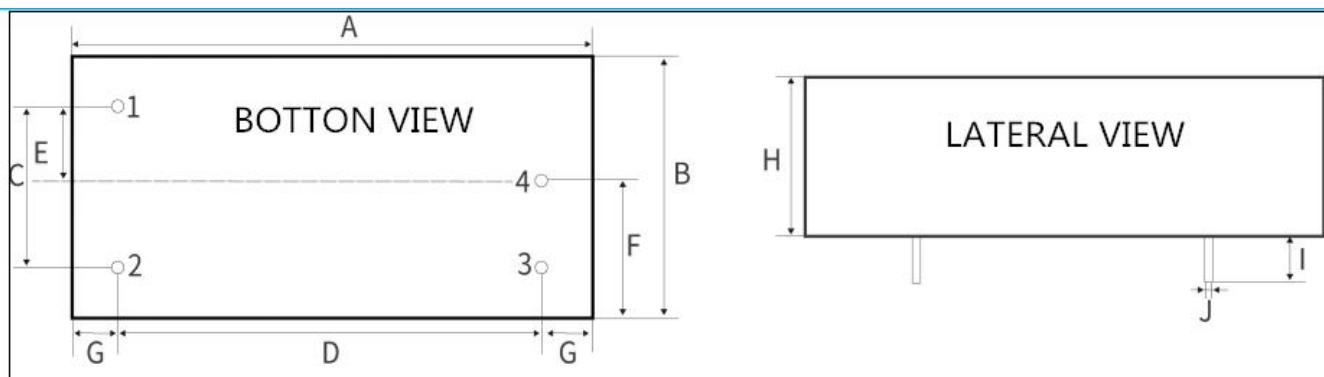
Product Program

PART #	Input voltage range	Output voltage / current					
		VO1		VO2		VO3	
		V	mA	V	mA	V	mA
LA12-220S05	220V(85~265VAC) 120~380VDC	5V	2400mA				
LA12-220S09		9V	1333mA				
LA12-220S12		12V	1000mA				
LA12-220S15		15V	800mA				
LA12-220S24		24V	500mA				

*NOTE:

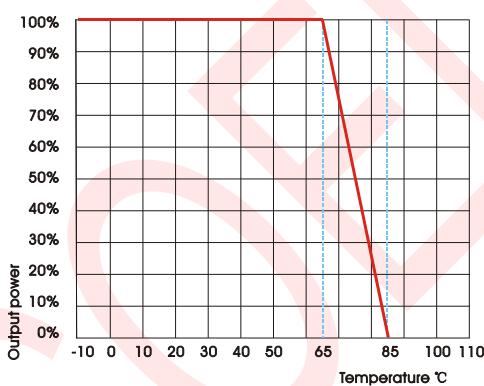
The output ripple noise (peak value) measurement, please reference module test instructions.

Mechanical Dimension



SIZE:51*25.5*15.5mm(A*B*H)

Temperature Curve



Mechanical Data

WATT	L x W x H	Package
12W	51 x 25.5 x 15.5mm	

Pin Assignment

PIN	1	2	3	4					
Single O/P	AC	AC	+Vo	-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.