

### Typical Performance

#### FEATURES

- Fixed Input, isolation, unregulated single output,2W
- Isolation voltage: 1000VDC
- DIP package
- Efficiency :up to 80%
- Working temperature -40℃~+85℃
- MTBF≥35x10<sup>5</sup>Hrs
- Industry standard pinout
- Isolation capacitance:90PF
- No external component required
- In line with RoHS codes
- Line regulation (for Vin change of ±1%): ±1.2%(max)
- Load regulation (10%-100% load) 15%
- Ripple and noise (20MHz Band width) <75mVp-p
- Temperature drift(100% full load):±0.03%/℃(max)
- Switching Frequency(Full load,nominal input):100Khz(typ)
- Storage Temperature:-55℃~+125℃
- Isolation Resistance:1000MΩ/1min
- Isolation capacitance:60Pf(typ)
- Cooling:Free aire convection



3-Years Product Warranty

### Product Program

Part #	Input voltage range	Nominal output voltage / output current						Efficiency (%, typ)
		VO1			VO2			
		Voltage (VDC)	(mA)	(mA)	Voltage (VDC)	(mA)	(mA)	
B0303D-2W	3V(3~3.6V)	3.3	400					73
B0503D-2W		3.3	400					74
B0505D-2W	5V(4.5~5,.5V)	5	400					81
B0509D-2W		9	222					84
B0512D-2W		12	167					83
B0515D- 2W		15	133					84
B1205D-2W	12V(10.8~13.2V)	5	400					81
B1209D-2W		9	222					82

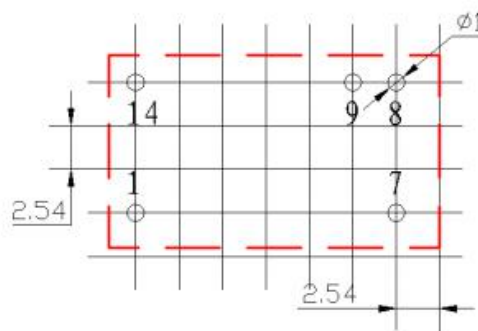
B1212D-2W		12	167					85
B1215D-2W		15	133					82
B1224D-2W		24	83					87
B2405D-2W	24V(21.6~26.4V)	5	400					80
B2409D-2W		9	222					83
B2412D-2W		12	167					84
B2415D-2W		15	133					84
B2424D-2W		24	83					84

## Mechanical Data

## Typical Temperature Curve

## Mechanical Dimension

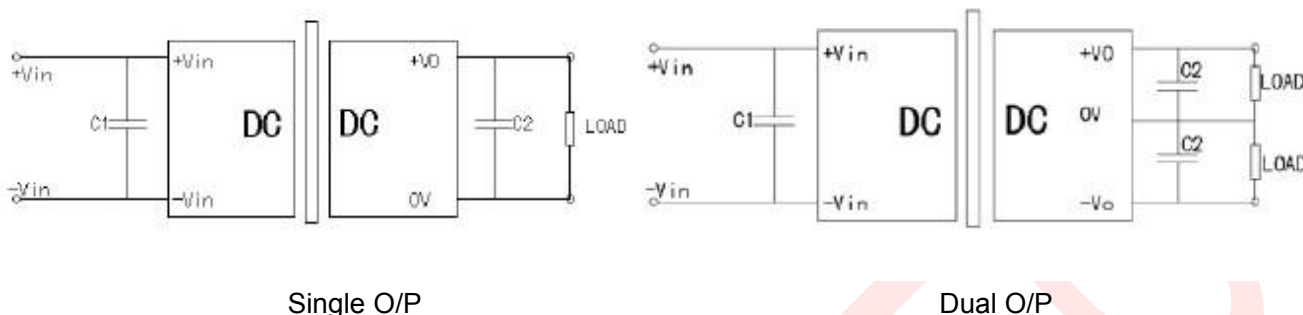
BOTTON VIEW      unit:mm



## Pin Assignment

PIN	1	7	8	9	14					
Single output	GND	NC	0V	+Vo	Vin					

## Recommend Circuit



## C1、C2 select

INPUT VOLTAGE	C1	VOLTAGE	C2		
3.3VDC	4.7uF	3.3VDC	10uF		
5VDC	4.7uF	5VDC	10uF		
12VDC	2.2uF	9VDC	4.7uF		
15VDC	2.2uF	12VDC	2.2uF		
12VDC	1uF	15 VDC/24VDC	1uF		

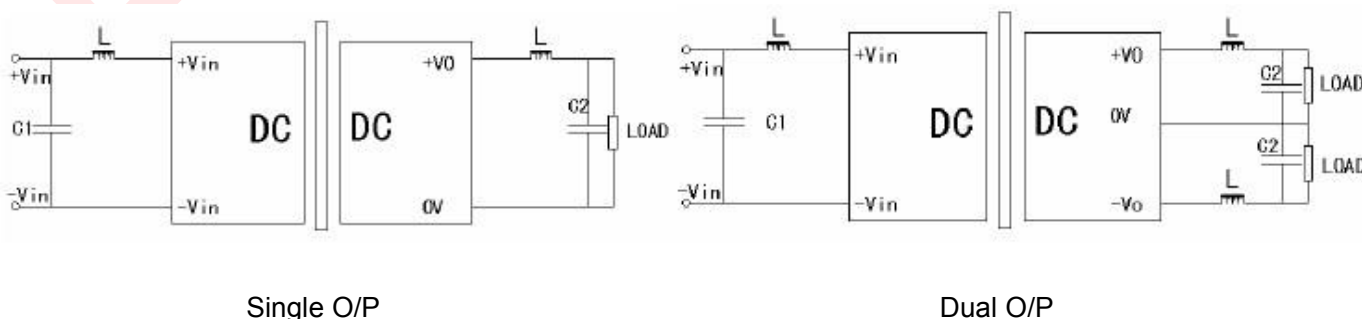
## Application Note

(1)PIs don't use under no load: when the load power is less than 10% of the rated power ,we advise to connect the resistance following the output or the selection the smaller rated power module,for the resistance,the value is 5~10% of the rated power,resistance= $U_z / (10\% \times 1W)$

(2)PIs don't connect the excessive capacitor in external circuit :output connects C2's value can't be too big,, otherwise easily lead to module startup flow or poor starting,

According to the external table to select the capacitance

(3)For the ripple&noise with higher requirements ,we advise to connect the LC filter, the frequency of LC filter is far smaller than the DC / DC module switching frequency, prevent mutual interference, resulting in increased the ripple damage the power module,pls see below



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