

Typical Performance

FEATURES

- Fixed Input, isolation, Unregulated Output,0.5W
- Isolation voltage: 1KVDC,1.5KVDC,3KVDC
- SIP package
- Efficiency :up to 80%
- Working temperature -40℃~+85℃
- MTBF≥35x10⁵Hrs
- Industry standard pinout
- No heat sink required
- 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)
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- 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

BN 0.25	xx	S	XX	S/S3
①	②	③	④	⑤

- ① Series name
- ② Output watt
- ③ Normal input voltage
- ④ Single output
- ⑤ Output voltage
- ⑥ I/O isolation(S:1KV,No S:1.5KV,S3:3KV)

Product Program

Part #	Input voltage range	Nominal output voltage / output current						Efficiency (%, typ)
		VO1			VO2			
		Voltage (VDC)	Min (mA)	Max (mA)	Voltage (VDC)	Min (mA)	Max (mA)	
BN0.5-05S05	5V（4.5~5.5VDC）	5V	10	100				72
BN0.5-05S09		9V	5.5	55				74
BN0.5-05S12		12V	4.1	41				72
BN0.5-05S15		15V	3.3	33				74
BN0.5-05S24		24V	2	20				72
BN0.5-12S05	12 V（10.8~13.2VDC）	5V	10	100				74
BN0.5-12S09		9V	5.5	55				72
BN0.5-12S12		12V	4.1	41				74
BN0.5-12S15		15V	3.3	33				74

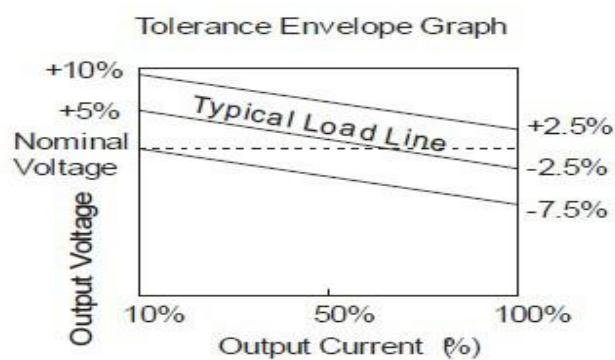
BN0.5-12S24	24V (21.6~26.4VDC)	24V	2	20				72
BN0.5-24S05		5V	10	100				74
BN0.5-24S09		9V	5.5	55				72
BN0.5-24S12		12V	4.1	41				74
BN0.5-24S15		15V	3.3	33				74
BN0.5-24S24		24V	2	20				72

- Shows the nominal value of input voltage,due to space limitations ,the above list is only for some products,If other than a list of products, please contact the Company's sales department.

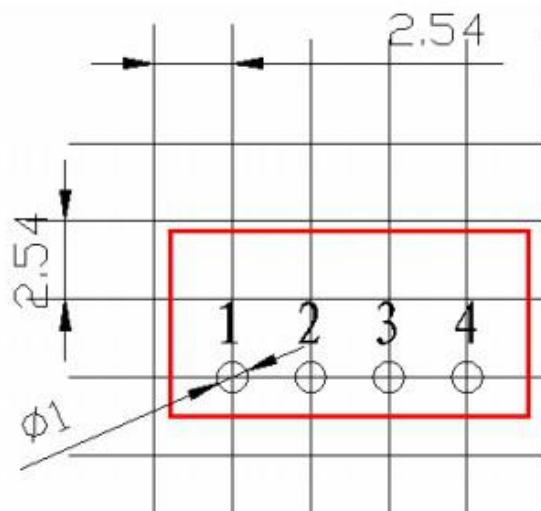
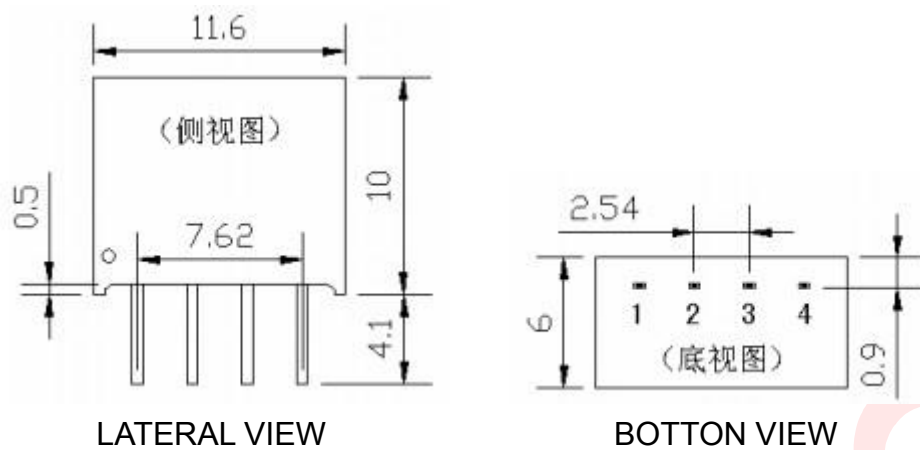
Mechanical Data

Packing Code	L x W x H : mm	Packing No.
A	11.5X10X6	

Typical Temperature Curve



Mechanical Dimension

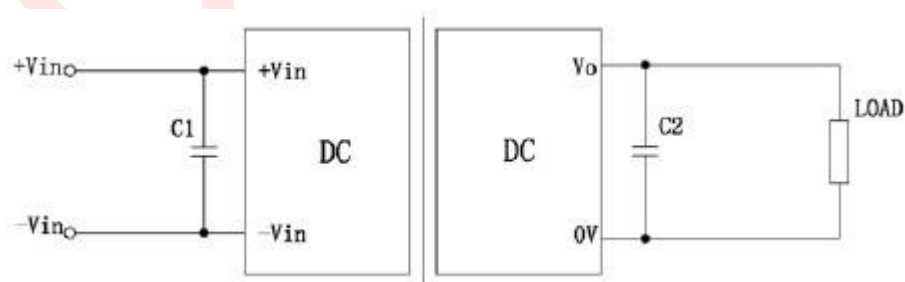


UNIT:mm

Pin Assignment

PIN	1	2	3	4						
Single output	GND	Vin	0V	+Vo						

Recommend Circuit



C1、C2 select

INPUT VOLTAGE(S)	C1	O/P VOLTAGE(D)	C2
3.3VDC	4.7uF	3.3VDC	10uF
5VDC	4.7uF	5 VDC	10uF
12VDC	2.2uF	9 VDC	4.7uF

---	---	12 VDC	2.2 uF
---		15 VDC	1 uF

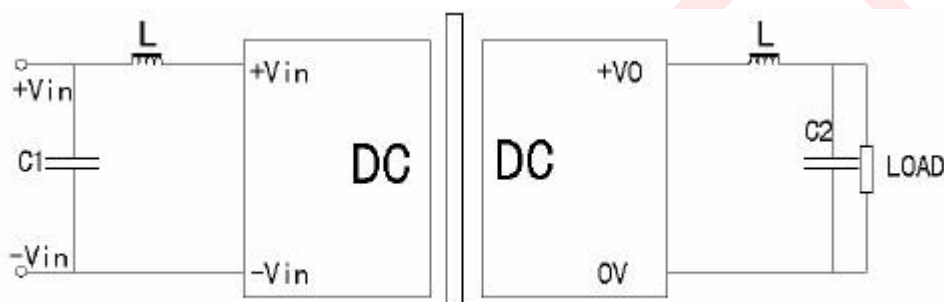
Application Note

(1)Pls 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= $U_2 / (10\% \times 1W)$

(2)Pls 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.