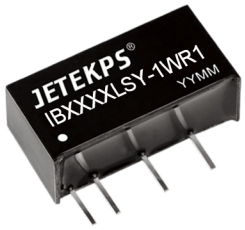
FEATURES

- Small volume, high power density
- High efficiency, low output ripple and noise
- Low zero-load power consumption, low static current
- Long time short circuit protection and self-recovery
- superior thermal stability and temperature characteristics
- Wide temperature performance at full 1 watt load: -40℃ ~ +85℃
- Isolation Voltage:1500VDC
- High Reliability（MTTF≥350 ten thousand hours）
- International standard SIP package, save PCB installation space
- Environmental design, ROHS compliant
- 100% full load aging



RoHS

Isolate/Stabilivolt

Single output

PRODUCT MODEL LIST

Order Code	Norminal Input Voltage (V)		Norminal Output Voltage		Efficiency [Typ] (%)	Capacitive Load [Max] (uF)
	Norminal	Range	Voltage (V)	Current (mA)		
IB0303LSY-1WR1	3.3	3.15~3.45	3.3	303	70	3300
IB0305LSY-1WR1			5	200	72	2200
IB0503LSY-1WR1	5	4.75~5.25	3.3	303	67	3300
IB0505LSY-1WR1			5	200	76	2200
IB0512LSY-1WR1			12	83	75	2200
IB0515LSY-1WR1			15	67	73	1000
IB0524LSY-1WR1			24	42	72	1000
IB1203LSY-1WR1	12	11.4~12.6	3.3	303	71	2200
IB1205LSY-1WR1			5	200	76	2200
IB1212LSY-1WR1			12	83	78	1000
IB1215LSY-1WR1			15	67	73	1000
IB1224LSY-1WR1			24	42	72	1000
IB1503LSY-1WR1	15	14.25~15.75	3.3	303	65	3300
IB1505LSY-1WR1			5	200	76	2200
IB1512LSY-1WR1			12	83	76	1000
IB1515LSY-1WR1			15	67	73	1000
IB1524LSY-1WR1			24	42	72	1000
IB2403LSY-1WR1	24	22.8~25.2	3.3	303	70	2200
IB2405LSY-1WR1			5	200	75	2200
IB2412LSY-1WR1			12	83	82	1000
IB2415LSY-1WR1			15	67	74	1000
IB2424LSY-1WR1			24	42	75	1000

OUTPUT CHARACTERISTICS

Parameter	Conditions		Min.	Typ.	Max.	Units
Output Power			0.1		1	W
Line Voltage Regulation	Input voltage change ±1% at rated load				±0.5	%
Load Regulation	Load varies from 10% to 100% at nominal input				±2	
Output voltage accuracy	100% load				±3	
Quiescent Current	Output load is 0 at nominal input	IB03XX	≤12			mA
		etc.	≤8			
Temps Drift Coefficient	Rated load				±0.03	%/℃
Ripple & Noise	At 20MHz bandwidth			30	60	mVp-p
Switching Frequency	Rated input voltage			280		KHz

Output Short Circuit Protection	Sustainable and automatic restoration
Input Filter	Filter capacitor
Hot Plug	Nonsupport

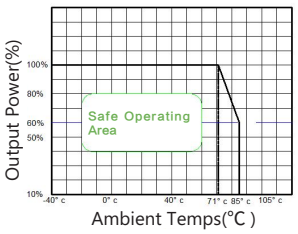
Insulation Characteristic

Parameter	Conditions	Min.	Typ.	Max.	Units
Insulation Resistance	500VDC	1000			MΩ
Insulation Voltage	Test time 1 minute, leakage current less than 1 mA	1500			VDC

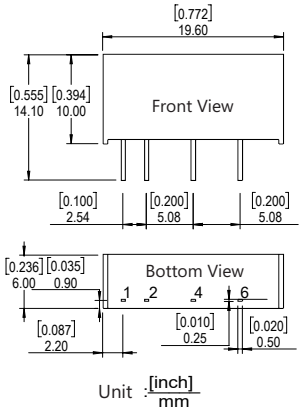
General Characteristic

Parameter	Conditions	Min.	Typ.	Max.	Units
Storage Humidity		5		95	%
Operating Temps		-40		85	℃
Storage Temps		-55		125	
Operating Case Temps			15	25	
Pin Welding Temps	Welding joint 1.5mm from case,10 seconds operation			300	
MTTF	MIL-HDBK-217@25℃	350			10000 hours
Weight			2.1		g
Cooling	Free air convection				
Case Material	Flame-retardant and heat-resistant plastic（UL94-V0）				

Temps Curve



Shape & Pin Dimensions

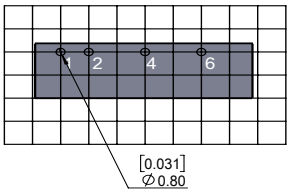


Pin	Function
1	Vin
2	GND
4	0V
6	+Vo

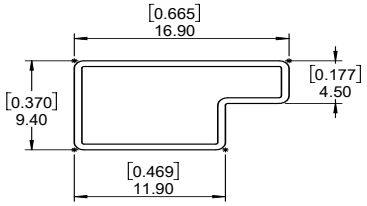
ps:
Terminal section tolerance: ±0.10 [±0.004]
Unmarked tolerance: ±0.25 [±0.010]

PCB

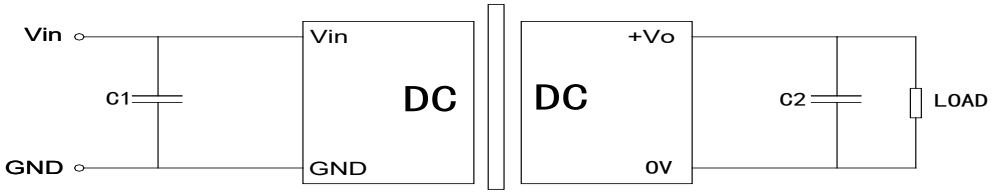
[0.1inch]2.54mm suqare grid



Package Dimensions



Basic Application Circuit



Options of C1、C2:

Input Voltage	External Capacitance	Output Voltage	External Capacitance
3.3/5VDC	4.7uF	3.3/5VDC	10uF
12VDC	4.7uF	9VDC	4.7uF
15VDC	2.2uF	12VDC	2.2uF
24VDC	1uF	15VDC	1uF
--	--	24VDC	0.47uF

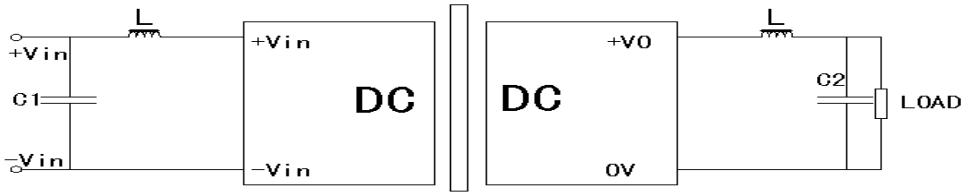
Note

Try To Avoid No-load Use: If the load power consumption is less than 10% of the rated output power of the module, it is recommended to connect a dummy load to the output terminal or select a module with a lower rated power. The dummy load (resistance) can be calculated by 10% of the rated power of the module, and the resistance value is R=U2 / (10% x 1W).

Avoid Excessive Output External Capacitance: The capacity value of the output external capacitor C2 should not be too large, otherwise it is easy to cause overcurrent or bad startup when the module is started. The specific value should be selected according to the external capacitor table.

The input of this series does not support parallel use of hot plug and output.

For situations requiring high ripple noise, external LC filter circuit should be connected, and the resonant frequency of LC filter should be far less than the switching frequency of DC/DC module to prevent mutual interference, resulting in output ripple increase or module damage, as shown in the figure:



Naming Logic Of Constant Voltage Products

