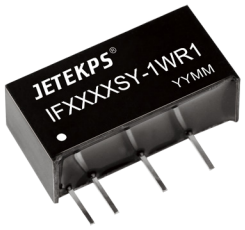
FEATURES

- 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:3000VDC
- 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)		
IF0303SY-1WR1	3.3	3.15~3.45	3.3	303	63	3300
IF0305SY-1WR1			5	200	65	2200
IF0503SY-1WR1	5	4.75~5.25	3.3	303	67	3300
IF0505SY-1WR1			5	200	76	2200
IF0512SY-1WR1			12	83	75	2200
IF0515SY-1WR1			15	67	73	1000
IF0524SY-1WR1			24	42	72	1000
IF1203SY-1WR1	12	11.4~12.6	3.3	303	71	2200
IF1205SY-1WR1			5	200	76	2200
IF1212SY-1WR1			12	83	78	1000
IF1215SY-1WR1			15	67	73	1000
IF1224SY-1WR1			24	42	72	1000
IF1503SY-1WR1	15	14.25~15.75	3.3	303	65	2200
IF1505SY-1WR1			5	200	76	2200
IF1512SY-1WR1			12	83	76	2200
IF1515SY-1WR1			15	67	73	1000
IF1524SY-1WR1			24	42	72	1000
IF2403SY-1WR1	24	22.8~25.2	3.3	303	70	2200
IF2405SY-1WR1			5	200	75	2200
IF2412SY-1WR1			12	83	78	1000
IF2415SY-1WR1			15	67	74	1000
IF2424SY-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	IF03XX	≤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

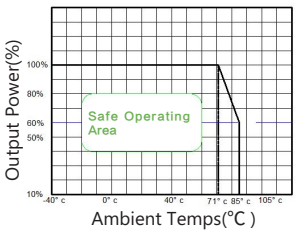
Insulation Characteristic

Parameter	Conditions	Min.	Typ.	Max.	Units
Insulation Resistance	500VDC	1000			MΩ
Insulation Voltage	Test time 1 minute, leakage current less than 1 mA	3000			VDC

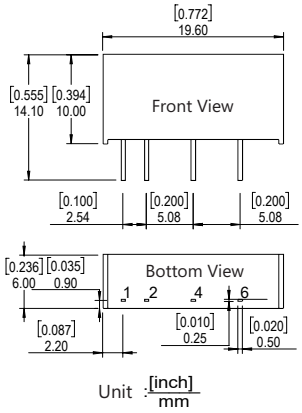
General Characteristic

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

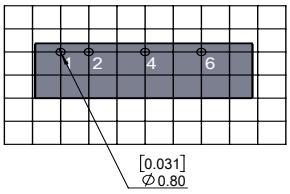


Pin	Function
1	Vin
2	GND
4	0V
6	+Vo

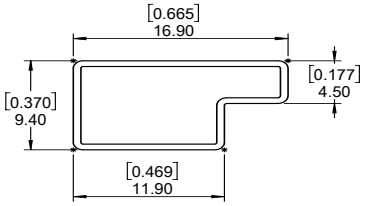
ps:
Terminal section tolerance: ±0.10 [±0.004]
Unmarked tolerance: ±0.25 [±0.010]

PCB

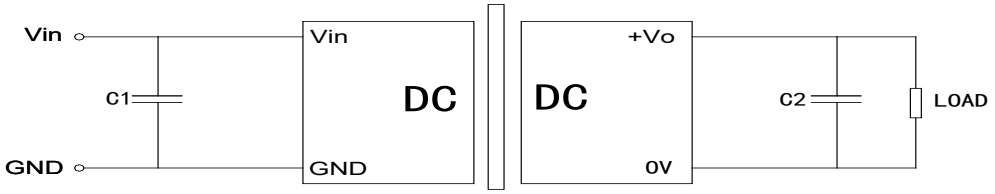
[0.1inch]2.54mm suqare grid



Package Dimensions



Basic Application Circuit



Options of C1、C2:

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

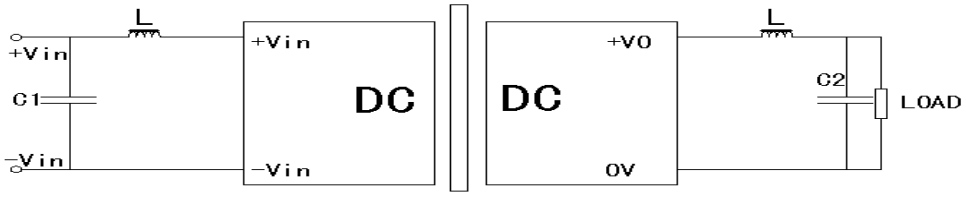
Note

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

