2W, DC/DC module power supply

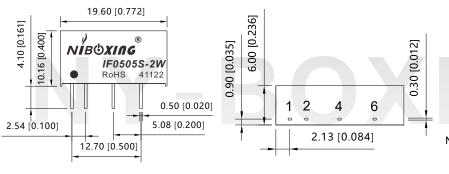


## **FEATURES**

- ★ Compact size, high power density
- ★ Operating temperature range: -40°C to +85°C
- ⋆ No-load input current as low as 5mA
- ⋆ I/O isolation test voltage 3000VDC
- ★ Low ripple & noise
- ★ RoHS Compliant
- ★ Industrial grade, high reliability

IFxxxxS-2W series are specially designed for applications where an isolated voltage is required in a distributed power supply system. They are suitable for: pure digital circuits, low frequency analog circuits, relay-driven circuits and data switching circuits.

# **Dimensions**



PIN	Function	
1	+Vi	
2	-Vi	
4	-Vo	
6	+Vo	

Note:

Unit:mm[inch]

Pin section tolerance:±0.15[0.06]

Other dimensional tolerance: ±0.3[±0.012]

#### Selection Guide

Front View

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Part No.	Input Voltage	Nominal Output Voltage	Efficiency (%)(Typ.)	<b>Output Current</b>	Max. Capacitive
Part No.	(VDC)	and Current	@ Full Load	(mA)(Min.)	Load(μF)
IF0303S-2W		3.3V/600mA	81%	30mA	10uF
IF0305S-2W	2.97~3.63V (Typ: 3.3VDC)	5V/400mA	81%	20mA	10uF
IF0312S-2W		12V/166mA	82%	9mA	4.7uF
IF0315S-2W		15V/133mA	78%	7mA	2.2uF
IF0324S-2W		24V/83mA	82%	4mA	1uF
IF0503S-2W		3.3V/600mA	81%	30mA	10uF
IF0505S-2W	4.5~5.5V (Typ: 5VDC)	5V/400mA	81%	20mA	10uF
IF0512S-2W		12V/166mA	82%	9mA	4.7uF
IF0515S-2W	(Typ. 3VDC)	15V/133mA	78%	7mA	2.2uF
IF0524S-2W		24V/83mA	82%	4mA	1uF

**Bottom View** 



IF1203S-2W	- 10.0 12.07	3.3V/600mA	81%	30mA	10uF
IF1205S-2W		5V/400mA	83%	20mA	10uF
IF1212S-2W	- 10.8~13.2V <del>-</del> - (Typ: 12VDC) <i>-</i>	12V/166mA	79%	9mA	4.7uF
IF1215S-2W	- (Typ. 12VDC) —	15V/133mA	80%	7mA	2.2uF
IF1224S-2W		24V/83mA	81%	4mA	1uF
IF1503S-2W		3.3V/600mA	81%	30mA	10uF
IF1505S-2W	125 1657	5V/400mA	79%	20mA	10uF
IF1512S-2W	- 13.5~16.5V <sup>—</sup> - (Typ: 15VDC) <i>—</i>	12V/166mA	83%	9mA	4.7uF
IF1515S-2W	(Typ. 13VDC) =	15V/133mA	82%	7mA	2.2uF
IF1524S-2W		24V/83mA	79%	4mA	1uF
IF2403S-2W	_	3.3V/600mA	81%	30mA	10uF
IF2405S-2W	- 21.6 26.41/ -	5V/400mA	80%	20mA	10uF
IF2412S-2W	- 21.6~26.4V <del>-</del> - (Typ: 24VDC) <i>-</i>	12V/166mA	81%	9mA	4.7uF
IF2415S-2W	- (Typ. 24VDC) -	15V/133mA	82%	7mA	2.2uF
IF2424S-2W	_	24V/83mA	80%	4mA	1uF
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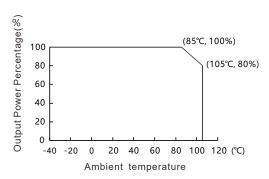
Output Specifications				
Item	<b>Operating Conditions</b>	Min	Тур	Max
Output Power				
Output Voltage Accuracy	100% load		±1%	
Line Regulation	Input voltage change: ±1%		±1.5%	
Load Regulation	10%~100% Load		±1%	
Ripple & Noise*	20MHz bandwidth		75mV	
	(peak-to-peak value)		751110	
Temperature Drift Coefficient	100% load			±0.03%/°C
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Note: \*Ripple and noise tested with "parallel cable" method, please see DC-DC Converter Application Notes for specific operation methods. **General Specifications** 

Item	Operating Conditions	Min	Тур	Max
Insulation Voltage	Input-Output, Test for 1min		3000VDC	
Operating Temperature	9	-40°C		+85℃
Storage Temperature		-40°C		+125℃
Storage Humidity				95%RH
Working Frequency	_		100KHz	
MTBF	MIL-HDBK-217F, 25°C		3500,000h	
Casing Material	Black flame-reta	Black flame-retardant and heat-resistant plastic (UL94-V0)		

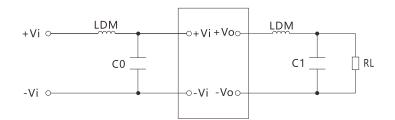
# Product Characteristic Curve

#### Temperature Derating Curve



### Design Reference

# 1 Typical application



#### Note

a. Ceramic capacitor or electrolytic capacitor is recommended for external capacitor of product input or output. Tantalum capacitors are not recommended, otherwise there is a certain failure risk.

b. The product does not support output and joint power or hot plug

Input Voltage	3.3V	5V	12V	15V	24V
C0	4.7µF	4.7µF	2.2µF	2.2µF	1µF
Output Voltage	3.3V	5V	12V	15V	24V
C1	10μF	10µF	4.7µF	2.2µF	1µF

6.8µH

# Safety precautions

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- 1.If the product is not operated within the required load range, the product performance cannot be guaranteed to comply with all parameters in the datasheet;
- 2. Unless otherwise specified, parameters in this datasheet were measured under the conditions of Ta=25°C, humidity<75% with nominal input voltage and rated output load;
- 3. All index testing methods in this datasheet are based on our Company's corporate standards;
- 4. We can provide product customization service, please contact our technicians directly for specific information;
- 5. For more product information, please visit our official website www.gzny-boxing.com or email us (sales@gzny-boxing.com).

NYBOXING GUANGZHOU ELECTRONIC&TECHNOLOGY CO.,LTD