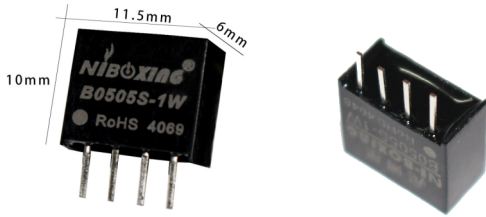


1W, Fixed input voltage, isolated & unregulated single output

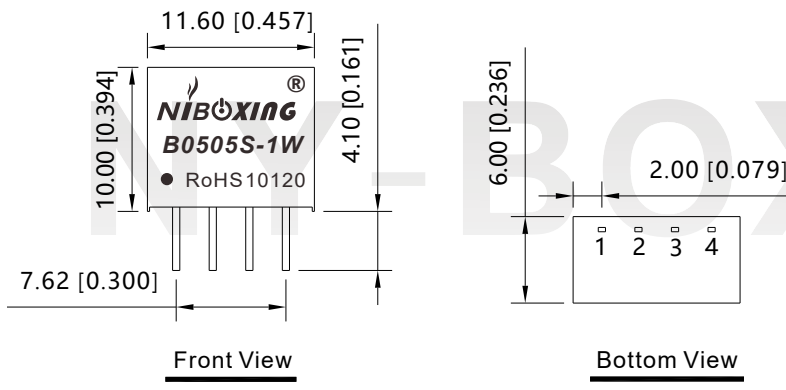
FEATURES



- ★ 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 1.5K VDC
- ★ Low ripple & noise
- ★ RoHS Compliant
- ★ Industrial grade, high reliability

BxxxxS-1W 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
3	-Vo
4	+Vo

Note:
 Unit:mm[inch]
 Pin size: 0.3x0.5[0.012x0.020]
 Pin diameter tolerances:±0.10[±0.004]
 General tolerances:±0.50[±0.020]

Selection Guide

Part No.	Input Voltage (VDC)	Nominal Output Voltage and Current	Efficiency (%) (Typ.) @ Full Load	Output Current (mA) (Min.)	Max. Capacitive Load (µF)
B0303S-1W	2.97~3.63V (Typ: 3.3VDC)	3.3V/300mA	81%	30mA	10µF
B0305S-1W		5V/200mA	81%	20mA	10µF
B0312S-1W		12V/83mA	82%	9mA	4.7µF
B0315S-1W		15V/67mA	78%	7mA	2.2µF
B0324S-1W		24V/42mA	82%	4mA	1µF
B0503S-1W	4.5~5.5V (Typ: 5VDC)	3.3V/300mA	81%	30mA	10µF
B0505S-1W		5V/200mA	81%	20mA	10µF
B0512S-1W		12V/83mA	82%	9mA	4.7µF
B0515S-1W		15V/67mA	78%	7mA	2.2µF
B0524S-1W		24V/42mA	82%	4mA	1µF

B1203S-1W		3.3V/300mA	81%	30mA	10uF
B1205S-1W	10.8~13.2V (Typ: 12VDC)	5V/200mA	83%	20mA	10uF
B1212S-1W		12V/83mA	79%	9mA	4.7uF
B1215S-1W		15V/67mA	80%	7mA	2.2uF
B1224S-1W		24V/42mA	81%	4mA	1uF
B1503S-1W		3.3V/300mA	81%	30mA	10uF
B1505S-1W	13.5~16.5V (Typ: 15VDC)	5V/200mA	79%	20mA	10uF
B1512S-1W		12V/83mA	83%	9mA	4.7uF
B1515S-1W		15V/67mA	82%	7mA	2.2uF
B1524S-1W		24V/42mA	79%	4mA	1uF
B2403S-1W		3.3V/300mA	81%	30mA	10uF
B2405S-1W	21.6~26.4V (Typ: 24VDC)	5V/200mA	80%	20mA	10uF
B2412S-1W		12V/83mA	81%	9mA	4.7uF
B2415S-1W		15V/67mA	82%	7mA	2.2uF
B2424S-1W		24V/42mA	80%	4mA	1uF

Output Specifications

Item	Operating Conditions	Min	Typ	Max
Output Power		0.1W	--	1W
Output Voltage Accuracy	100% load	-7.5%	--	+2.5%
Line Regulation	Input voltage change: $\pm 1\%$	--	$\pm 1.5\%$	--
Load Regulation	10%~100% Load	--	15%	20%
Ripple & Noise*	20MHz bandwidth (peak-to-peak value)	--	75mV	100mV
Temperature Drift Coefficient	100% load	--	--	$\pm 0.03\%/^{\circ}\text{C}$

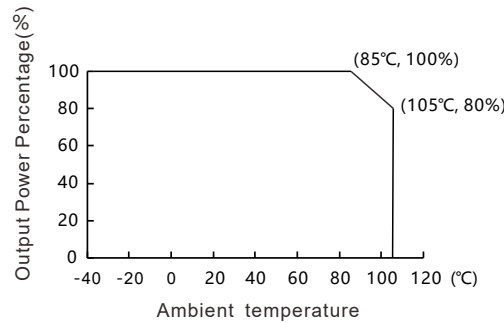
Note: *Ripple and noise tested with "parallel cable" method, please see DC-DC Converter Application Notes for specific operation methods.

General Specifications

Item	Operating Conditions	Min	Typ	Max
Insulation Voltage	Input-Output, Test for 1min	--	1500VDC	--
Operating Temperature		-40°C	--	+85°C
Storage Temperature		-40°C	--	+125°C
Storage Humidity		--	--	95%RH
Working Frequency		--	100KHz	--
MTBF	MIL-HDBK-217F, 25°C		3500,000h	
Casing Material	Black flame-retardant and heat-resistant plastic (UL94-V0)			

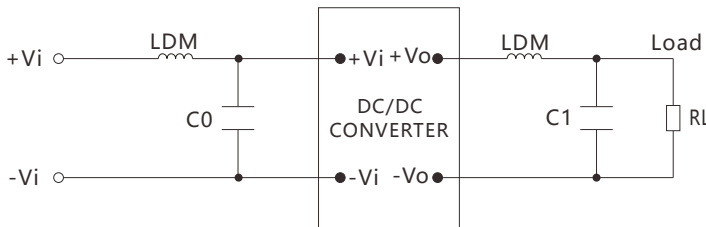
Product Characteristic Curve

Temperature Derating Curve



Design Reference

1 Typical application



Note

We recommend using an electrolytic capacitor or MLCC for C0,C1. Choose a Capacitor voltage rating with at least 20% margin, in other words not exceeding 80%.

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

LDM	6.8μH
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Safety precautions

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) .