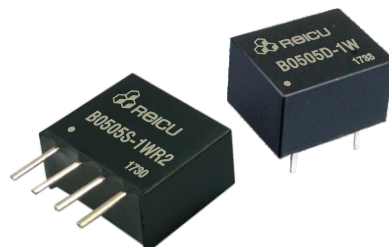


Features

- RoHS compliant
- Efficiency up to 81%
- 1.6kVDC Isolation
- Single output
- Short circuit protection(Suffix “R2” ,optional)
- Industry standard required
- Wide temperature performance
1 Watt load,-40°C to 85°C



Model Selection Guide

Order Code	Vin(V)		Output		Max capacitive Load	Efficiency(%) (Typ)
	Nominal	Range	Vo(V)	Io(mA)		
B0303S/D-1W(R2)	3.3	3.0-3.6	3.3	303	220	72
B0305S/D-1W(R2)			5	200		
B0505S/D-1W(R2)	5	4.5-5.5	5	200	150	77
B0509S/D-1W(R2)			9	111		
B0512S/D-1W(R2)			12	83		
B0515S/D-1W(R2)			15	67		
B0524S/D-1W(R2)			24	42		
B1205S/D-1W(R2)			12	10.8-13.2		
B1209S/D-1W(R2)	9	111				
B1212S/D-1W(R2)	12	83				
B1215S/D-1W(R2)	15	67				
B1224S/D-1W(R2)	24	42				
B2405S/D-1W(R2)	24	21.6-26.4			5	200
B2409S/D-1W(R2)			9	111		
B2412S/D-1W(R2)			12	83		
B2415S/D-1W(R2)			15	67		
B2424S/D-1W(R2)			24	42		

*All the specifications typical at Ta=+25°C resistive load, nominal input voltage and rated output current unless otherwise noted.

Input Characteristics

Parameter	Condition	Min	Typ	Max	Units
Input Surge Voltage (1 sec. Max.)	3.3V Input Models	-0.7	--	6	VDC
	5V Input Models	-0.7	--	9	
	12V Input Models	-0.7	--	18	
	24V Input Models	-0.7	--	30	
Input Filter	All Models	Internal Capacitor			

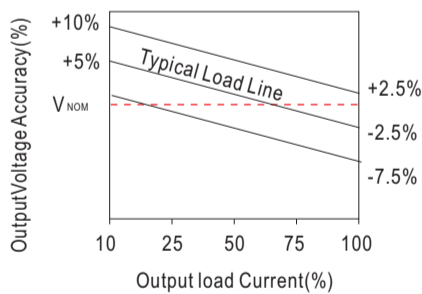
Output Characteristics

Parameter	Condition	Min	Typ	Max	Units
Line regulation	Vin change 1%	±1.2	--	±1.5	%
Switching frequency	Full load,nominal input	--	100	--	KHz
Load regulation	10%~100% load	6.5	--	15	%
Ripple and noise	BW=DC to 20MHz	--	75	≤100	mVp-p
Short circuit Protection		Continuous, Automatic Recovery			

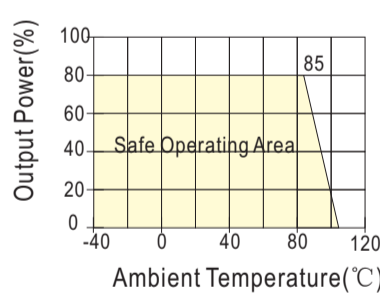
General Characteristics

Parameter	Condition	Min	Typ	Max	Units
Operating Temperature	All output types	-40	--	+85	°C
Storage		-55	--	+125	°C
Storage humidity		--	--	+95	%
Cooling	Free air convection	--	--	--	
Isolation voltage	1mA≤1minute	--	1600	--	VDC
Isolation resistance	500VDC	1000	--	--	MΩ
Switching Frequency		--	100	110	KHz
MTBF	3.5×10 ⁶				K hours

Tolerance Envelopes Curve

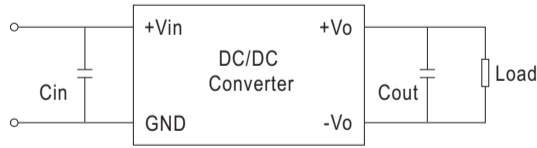


Temperature Derating Graph Curve



Input/Output Ripple Reduction

Reduce output ripple, it is recommended to use capacitors at the input/output.



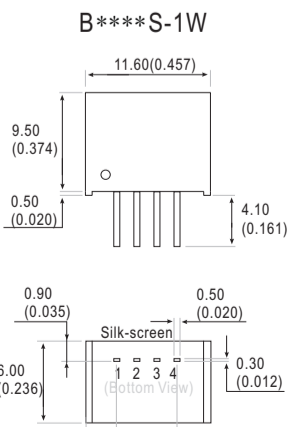
External Capacitor Table

Vin(VDC)	5	12	15	24	
Cin(uF)	4.7	2.2	2.2	1	
Vout(VDC)	5	9	12	15	24
Cout(uF)	10	4.7	2.2	1	0.47

Note

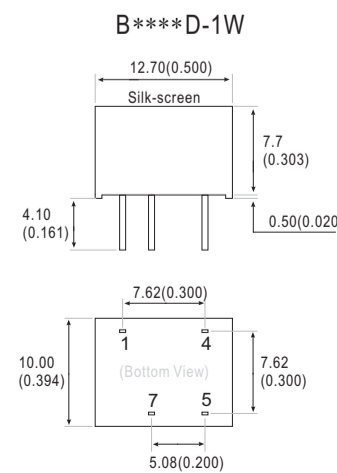
1. To ensure this module can operate efficiently and reliably, During operation, the minimum output load is not less than 10% of the full load.
2. Other input and output voltage may be available, please
3. Specifications subject to change without notice

Mechanical Dimension & Pin Connections



Pin	1	2	3	4
Function	GND	Vin	-Vo	+Vo

Note:
Unit:mm(inch)



Pin	1	4	5	7
Function	GND	Vin	+Vo	-Vo