Features

- RoHS compliant
- Efficiency up to 82%
- 1kVDC Isolation
- Single output
- Small size
- Industry standard required
- Wide temperature performance at full 2 Watt load,-40℃ to 85℃

Model Selection Guide

Order Code	Vin(V)		Output		Max capacitive Load	Efficiency(%) (Typ)
	Nominal	Range	Vo(V)	Io(mA)		
B0505M-2W	5	4.5-5.5	5	400	330	78
B0509M-2W			9	222	220	78
B0512M-2W			12	167	220	78
B0515M-2W			15	133	220	79
B0524M-2W			24	83	150	77
B1205M-2W	12	10.8-13.2	5	400	330	78
B1209M-2W			9	222	220	80
B1212M-2W			12	167	220	81
B1215M-2W			15	133	220	82
B1224M-2W			24	83	150	80
B2405M-2W	24	21.6-26.4	5	400	330	78
B2409M-2W			9	222	220	80
B2412M-2W			12	167	220	82
B2415M-2W			15	133	220	83
B2424M-2W			24	83	150	83

*All the specifications typical at Ta=+25℃ 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			

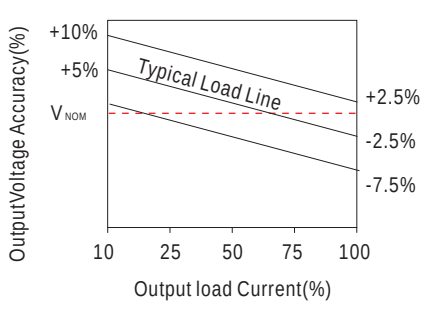
Output Characteristics

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

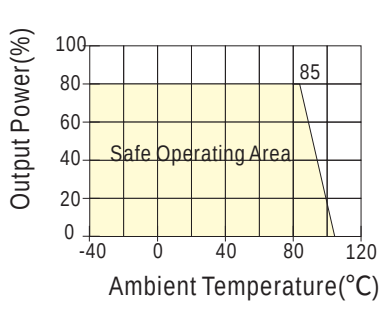
General Characteristics

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

Tolerance Envelopes Curve

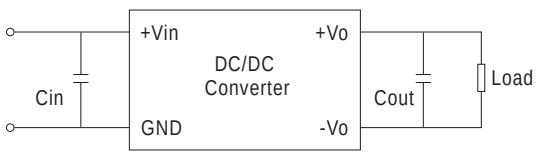


Temperature Derating Graph Curve



Input/Output Ripple Reduction

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



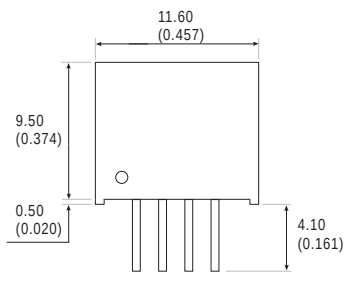
External Capacitor Table

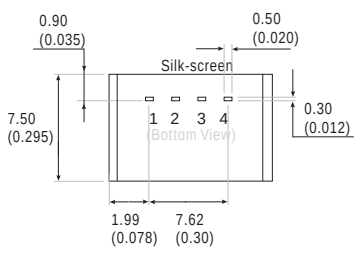
Vin(VDC)	5	12	15	24	
Cin(uF)	4.7	2.2	2.2	1	
Vout(VDC)	5	9	12	15	24
Cout(uF)	10	4.7	2.2	1	0.47

Note

1.To ensure this module can operate efficinetly 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





Note:
Unit:mm(inch)

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