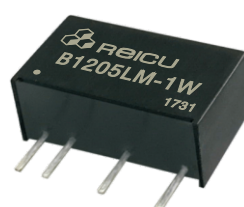


**Features**

- RoHS compliant
- Efficiency up to 80%
- 1.6kVDC Isolation
- Single output
- Industry standard required
- Wide temperature performance at full 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)		
B0303LM-1W	3.3	3.0-3.6	3.3	303	220	72
B0305LM-1W			5	200	220	74
B0505LM-1W	5	4.5-5.5	5	200	220	70
B0509LM-1W			9	111	150	77
B0512LM-1W			12	83	100	79
B0515LM-1W			15	67	100	81
B0524LM-1W			24	42	68	78
B1205LM-1W			12	10.8-13.2	5	200
B1209LM-1W	9	111			150	78
B1212LM-1W	12	83			100	78
B1215LM-1W	15	67			100	80
B1224LM-1W	24	42			68	80
B2405LM-1W	24	21.6-26.4	5	200	220	72
B2409LM-1W			9	111	150	78
B2412LM-1W			12	83	100	79
B2415LM-1W			15	67	100	79
B2424LM-1W			24	42	68	79

\*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			

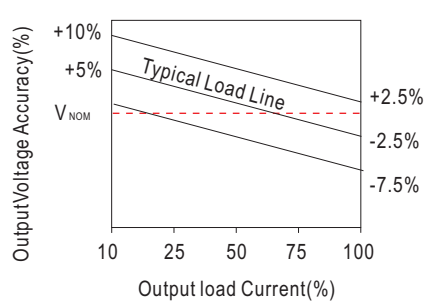
**Output Characteristics**

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

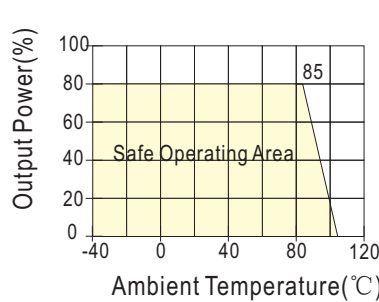
**General Characteristics**

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 <sup>6</sup>				K hours

**Tolerance Envelopes Curve**

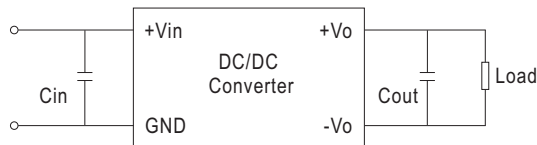


**Temperature Derating Graph Curve**



**Input/Output Ripple Reduction**

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



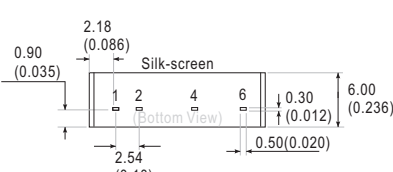
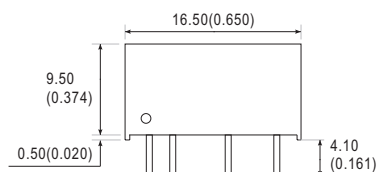
**External Capacitor Table**

Parameter	5	12	15	24	
Vin(VDC)	5	12	15	24	
Cin(μF)	4.7	2.2	2.2	1	
Vout(VDC)	5	9	12	15	24
Cout(μF)	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**



Note: Unit:mm (inch)

Pin Function	1	2	4	6
	Vin	GND	-Vo	+Vo