

## Features

- Micro Size SIP4 Package (11.5\*6.6\*7.8mm)
- 1KVDC & 3KVDC Isolation
- High Efficiency to 92%
- High Power Density 2W Output
- Optional Short Circuit Protection (Suffix "/P")
- Operating Temperature Range -40 °C to +100°C Without Derating
- Small Footprint
- No External Capacitor needed

## SIP4, Single Output



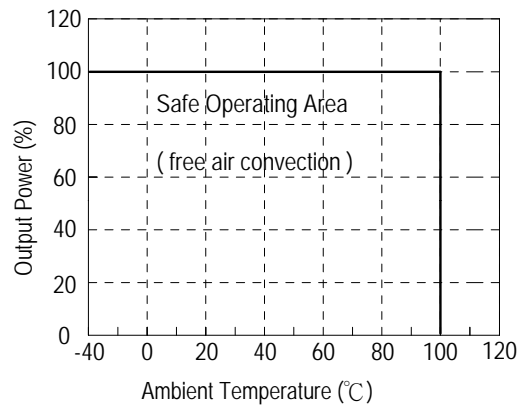
RoHS

## Description

The BOM2 series excellent performance. Micro SIP4 package, high efficiency up to 88%, high power density, 2W single output, area only 11.5\*6.6\*7.8 mm.

The BOM2 series because it's high efficiency, therefore it can operating at 85°C without derating and 100°C in 50% load.

## Derating Graph



## Selection Guide

Part Number	Input Voltage	Output Voltage	Output Current	Efficiency	Max. Capacitive Load
BOM2-xx3.3Sy	3.3, 5, 9, 12, 15, 24VDC	3.3VDC	600mA	76-84%	1000uF
BOM2-xx05Sy	3.3, 5, 9, 12, 15, 24VDC	5VDC	400mA	79-87%	680uF
BOM2-xx09Sy	3.3, 5, 9, 12, 15, 24VDC	9VDC	222mA	82-88%	470uF
BOM2-xx12Sy	3.3, 5, 9, 12, 15, 24VDC	12VDC	167mA	82-92%	330uF
BOM2-xx15Sy	3.3, 5, 9, 12, 15, 24VDC	15VDC	133mA	82-92%	220uF
BOM2-xx24Sy	3.3, 5, 9, 12, 15, 24VDC	24VDC	83mA	82-87%	100uF

xx=Input Voltage(possible for other input and output voltage combinations on request)

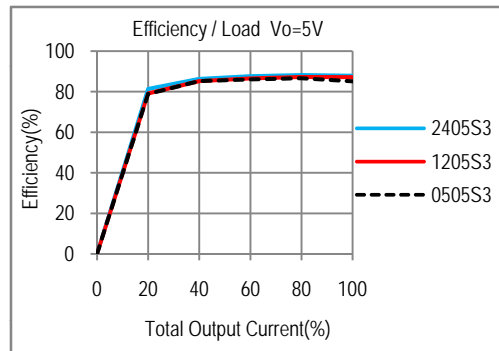
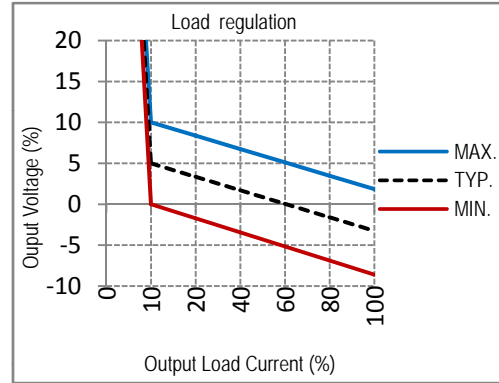
y=1=1KVDC,y=3=3KVDC ,e.g. BOM2-0505S1,BOM2-0505S3

Short circuit protection suffix"/p" option,e.g. BOM2-0505S1/P,BOM2-0505S3/P

**Specifications**

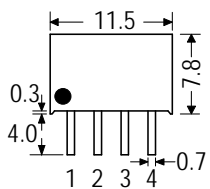
(measured at  $T_A=25^{\circ}\text{C}$  ,nominal input voltage, full load and after warm-up)

Input Voltage Range	±10%	
Output Voltage Accuracy	±5%	
Line Voltage Regulation	1.2%/ 1% of Vin typ.	
Load Voltage Regulation ( 10% to 100% full load )	All	10% max.
Output Ripple and Noise (20MHz Limited)	50mVp-p typ., 100mVp-p max.	
Temperature coefficient ( Full load )	0.03 %/°C max	
Operating Frequency	60kHz min. / 85kHz typ. / 110kHz max.	
Efficiency at Full Load	76% min. / 89% max.	
Isolation Voltage	Y=1 (tested for 1 second)	1KVDC
	Y=3 (tested for 1 second)	3KVDC
Isolation Capacitance (tested at 100kHz)	20pF min. / 75pF max.	
Isolation Resistance	15GΩ min.	
Short Circuit Protection	Without suffix "p"	1 Second
	Add suffix "p"	Continuous
Operating Temperature Range (free air convection)	-40°C to +100°C (see Graph)	
Storage Temperature Range	-55°C to +125°C	
Relative Humidity	95% RH	
Case Material	UL94-V0	Non-conductive black plastic
Polting Material	UL94-V0	Epoxy
Package Weight	1.1g	
Packing Quantity	42pcs per Tube	
Lead Temperature	300°C max, 1.5mm from case for 10 sec	
MTBF ( using MIL-HDBK 217F )	+25°C	4745x10 <sup>3</sup> hours
	+85°C	1087x10 <sup>3</sup> hours



**Package Style and Pinning (mm)**

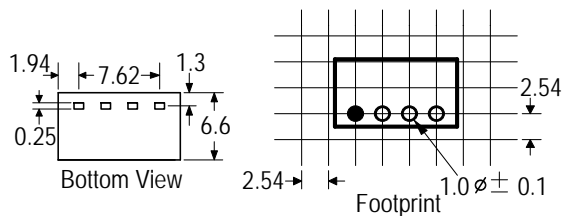
Micro Size 4 Pin SIP Package



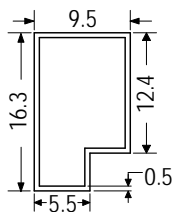
**Pin Connections**

Pin#	Out
1	-Vin
2	+Vin
3	-Vout
4	+Vout

XX.X ± 0.25 mm  
XX.XX ± 0.15 mm



**Tube Outline Dimensions (mm)**



Tolerance:  
XX.X ± 0.5 mm  
Note:  
L=520 ± 2 mm  
Devices per tube quantity: 42 PCS

