

Features

- Micro Size SIP4 Package (11.5*6.0*7.8mm)
- 1KVDC & 3KVDC Isolation
- High Efficiency to 89%
- High Power Density 1W 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

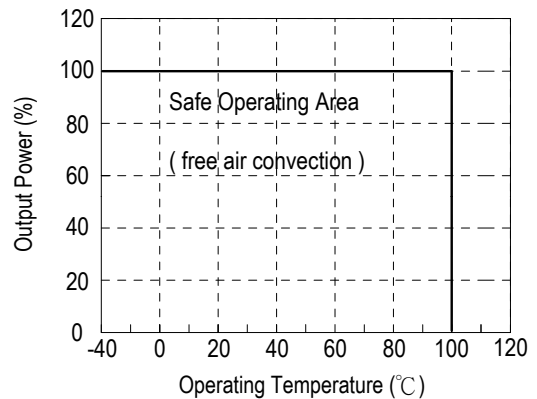
Description

The BOM1 series are miniature, excellent performance.

Micro SIP4 package, high efficiency up to 89%, 1W single output,

The BOM1 series because it's high efficiency, therefore it can operating at 100°C temperature and 100% load, fulfil most critical environment application.

Derating Graph



Selection Guide

Part Number	Input Voltage	Output Voltage	Output Current	Efficiency	Max. Capacitive Load
BOM1-xx3.3Sy	3.3, 5, 9, 12, 15, 24VDC	3.3VDC	303mA	75-84%	680uF
BOM1-xx05Sy	3.3, 5, 9, 12, 15, 24VDC	5VDC	200mA	78-85%	470uF
BOM1-xx09Sy	3.3, 5, 9, 12, 15, 24VDC	9VDC	111mA	82-87%	330uF
BOM1-xx12Sy	3.3, 5, 9, 12, 15, 24VDC	12VDC	84mA	82-89%	220uF
BOM1-xx15Sy	3.3, 5, 9, 12, 15, 24VDC	15VDC	66mA	82-88%	150uF
BOM1-xx24Sy	3.3, 5, 9, 12, 15, 24VDC	24VDC	42mA	82-86%	68uF

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

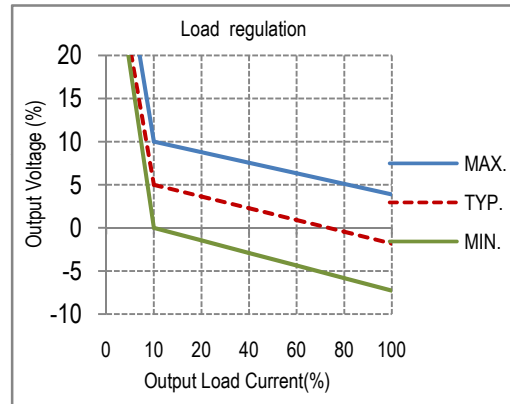
y=1=1KVDC,y=3=3KVDC ,e.g. BOM1-0505S1,BOM1-0505S3

Short circuit protection suffix"/p" option,e.g. BOM1-0505S1,BOM1-0505S3

Specifications

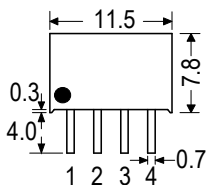
(measured at $T_A=25^{\circ}\text{C}$,nominal input voltage, full load and after warm-up)

Input Voltage Range	±10%	
Output Voltage Accuracy	±5%	
Line Voltage Regulation	1.2%/ 1% of V_{in} 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	75% 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
Potting 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	5173x10 ³ hours
	+85°C	2084x10 ³ hours



Package Style and Pinning (mm)

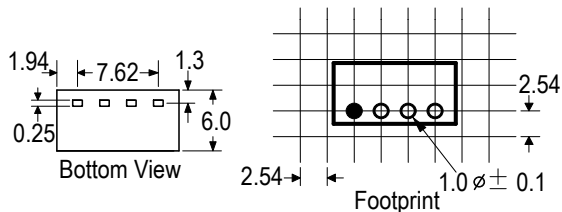
Micro Size 4 Pin SIP Package



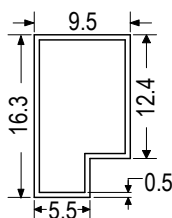
Pin Connections

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

