

Features

- Micro Size SIP7 Package (17.8*6.0*7.8mm)
- 1KVDC & 3KVDC Isolation
- High Efficiency to 92%
- Optional Short Circuit Protection (suffix "/P")
- 100°C Operating Temperature
- Operating Temperature Range -40°C to +100°C Without Derating
- Small Footprint
- No external capacitor needed

SIP7, Single & Dual Outputs

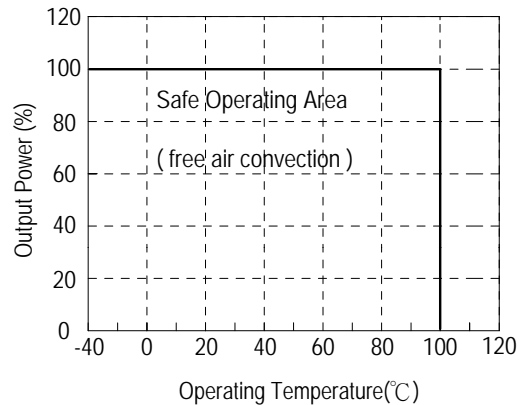


RoHS

Description

The BPM2 series are miniature excellent performance. Micro SIP7 package, high efficiency up to 88%, high power density, 2W single and dual outputs, area only 17.8*6.0*8.4mm. The BPM2 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
BPM2-xx3.3Sy	3.3, 5, 9, 12, 15, 24VDC	3.3VDC	600mA	81-84%	1000uF
BPM2-xx05Sy	3.3, 5, 9, 12, 15, 24VDC	5VDC	400mA	84-87%	680uF
BPM2-xx09Sy	3.3, 5, 9, 12, 15, 24VDC	9VDC	222mA	82-88%	470uF
BPM2-xx12Sy	3.3, 5, 9, 12, 15, 24VDC	12VDC	167mA	82-92%	330uF
BPM2-xx15Sy	3.3, 5, 9, 12, 15, 24VDC	15VDC	133mA	82-92%	220uF
BPM2-xx24Sy	3.3, 5, 9, 12, 15, 24VDC	24VDC	83mA	82-87%	100uF
BPM2-xx3.3Dy	3.3, 5, 9, 12, 15, 24VDC	±3.3VDC	±300mA	82-85%	±470uF
BPM2-xx05Dy	3.3, 5, 9, 12, 15, 24VDC	±5VDC	±200mA	85-87%	±330uF
BPM2-xx09Dy	3.3, 5, 9, 12, 15, 24VDC	±9VDC	±111mA	82-87%	±220uF
BPM2-xx12Dy	3.3, 5, 9, 12, 15, 24VDC	±12VDC	±83mA	82-92%	±150uF
BPM2-xx15Dy	3.3, 5, 9, 12, 15, 24VDC	±15VDC	±67mA	82-92%	±100uF
BPM2-xx24Dy	3.3, 5, 9, 12, 15, 24VDC	±24VDC	±42mA	82-87%	±47uF

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

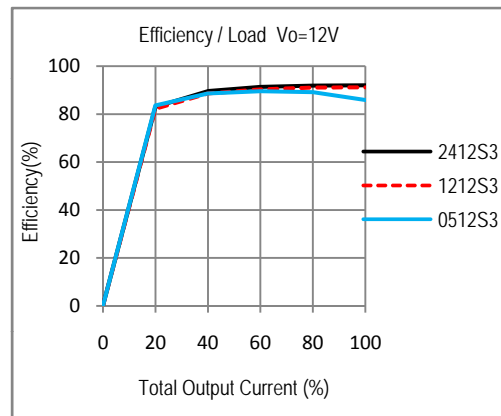
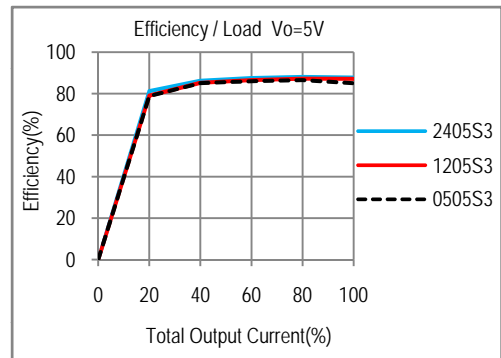
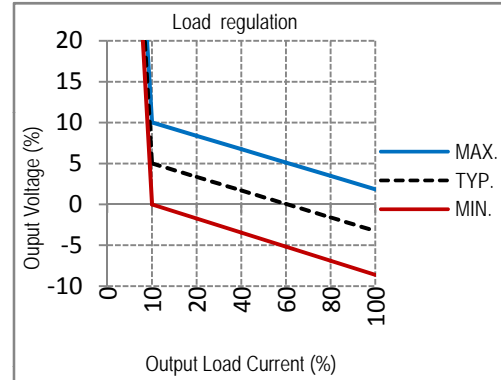
y=1=1KVDC,y=3=3KVDC, e.g. BPM2-0505S1,BPM2-0505D1,BPM2-0505S3,BPM2-0505D3

short circuit protection suffix "/P" option,e.g. BPM2-0505S1/P,BPM2-0505D1/P,BPM2-0505S3/P,BPM2-0505D3/P

Specifications

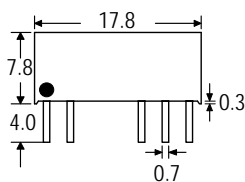
(measured at $T_A=25^{\circ}\text{C}$,nominal input voltage, full load and after warm-up)

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. / 92% 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			1.4g
Packing Quantity			28pcs per Tube
Lead Temperature	300°C max, 1.5mm from case for 10 sec		
MTBF (using MIL-HDBK 217F)	+25°C		4751x10 ³ hours
	+85°C		1279x10 ³ hours



Package Style and Pinning (mm)

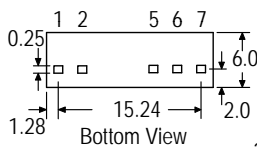
Micro Size 7 Pin SIP Package



Pin Connections

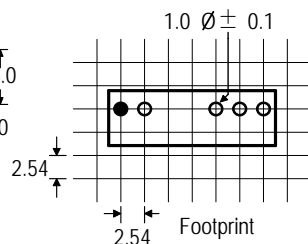
pin#	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
5	-Vout	-Vout
6	NP	COM
7	+Vout	+Vout

NP=No Pin

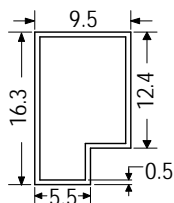


XX.X ± 0.25 mm

XX.XX ± 0.15 mm



Tube Outline Dimensions (mm)



Tolerance:

XX.X ± 0.5 mm

Note:

L=520 ± 2 mm

Devices per tube quantity: 28 PCS