

Features

- Micro Size SIP7 Package (17.8*6.6*8.4 mm)
- 6KVDC/3KVAC Isolation
- Doubled Isolation Construct for Medical Application
- High Efficiency to 88%
- Very Low I/O Capacitance 10PF max
- Suitable for Industrial IGBT Application
- Continuous Short Circuit Protection
- Operating Temperature Range -40°C to +100°C Without Derating.
- Small Footprint.
- No External Capacitor needed.

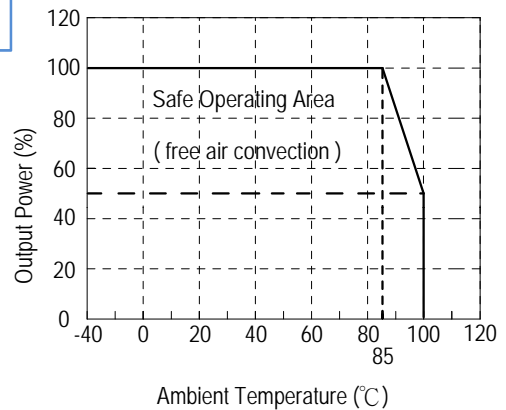
Description

The BPH2 series are miniature excellent performance. Micro SIP7 package, high efficiency up to 88%, high power density, 2W single and dual outputs, new unique construct for meets industry requirement and 6KVDC/3KVAC Hi-POT test. The BPH2 series because it's high efficiency, therefore it can operating at 85°C without derating and 100°C in 50% load.

SIP7, Single & Dual Outputs



Derating Graph



Selection Guide

Part Number	Input Voltage	Output Voltage	Output Current	Efficiency	Max. Capacitive Load
BPH2-xx3.3S	3.3, 5, 9, 12, 15, 24VDC	3.3VDC	600mA	74-80%	1000uF
BPH2-xx05S	3.3, 5, 9, 12, 15, 24VDC	5VDC	400mA	77-84%	680uF
BPH2-xx09S	3.3, 5, 9, 12, 15, 24VDC	9VDC	222mA	80-87%	470uF
BPH2-xx12S	3.3, 5, 9, 12, 15, 24VDC	12VDC	167mA	81-87%	330uF
BPH2-xx15S	3.3, 5, 9, 12, 15, 24VDC	15VDC	133mA	81-88%	220uF
BPH2-xx24S	3.3, 5, 9, 12, 15, 24VDC	24VDC	83mA	81-88%	100uF
BPH2-xx3.3D	3.3, 5, 9, 12, 15, 24VDC	±3.3VDC	±300mA	75-81%	±470uF
BPH2-xx05D	3.3, 5, 9, 12, 15, 24VDC	±5VDC	±200mA	77-84%	±330uF
BPH2-xx09D	3.3, 5, 9, 12, 15, 24VDC	±9VDC	±111mA	80-87%	±220uF
BPH2-xx12D	3.3, 5, 9, 12, 15, 24VDC	±12VDC	±83mA	81-87%	±150uF
BPH2-xx15D	3.3, 5, 9, 12, 15, 24VDC	±15VDC	±67mA	81-88%	±100uF
BPH2-xx24D	3.3, 5, 9, 12, 15, 24VDC	±24VDC	±42mA	81-88%	±47uF

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

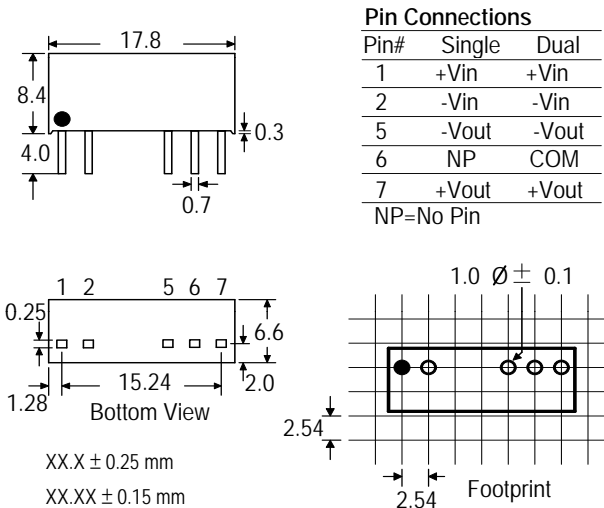
Specifications

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

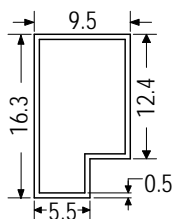
Input Voltage Range	±10%	
Output Voltage Accuracy	±5%	
Line Voltage Regulation	1.2%/ 1% of V_{in} typ.	
Load Voltage Regulation (10% to 100% full load)	All	10% max.
Output Ripple and Noise (20MHz Limited)	100mVp-p max.	
Temperature coefficient (Full load)	0.03%/°C max.	
Operating Frequency	60kHz min. / 85kHz typ. / 120kHz max.	
Efficiency at Full Load	74% min. / 88% max.	
Isolation Voltage	(tested for 1 second)	6000VDC
	(rated for 1 minute)	3000VAC / 60Hz
Isolation Capacitance (tested at 100kHz)	6pF min. / 10pF max.	
Isolation Resistance	15GΩ min.	
Short Circuit Protection	Continuous	
Operating Temperature Range (free air convection)	-40°C to +100°C (see Graph)	
Storage Temperature Range	-55°C to +125°C	
MTBF (using MIL-HDBK 217F)	+25°C	4235x10 ³ hours
	+85°C	945x10 ³ hours
Relative Humidity	95% RH	
Case Material	UL94-V0	Non-conductive black plastic
Potting Material	UL94-V0	Epoxy
Package Weight	1.8g	
Packing Quantity	28pcs per Tube	
Lead Temperature	300°C max. 1.5mm from case for 10 sec.	

Package Style and Pinning (mm)

Micro Size 7 Pin SIP Package



Tube Outline Dimensions (mm)



Tolerance:
 $XX.X \pm 0.5$ mm
Note:
L=520 ± 2 mm
Devices per tube quantity: 28 PCS

