

5V/200mA Output

Isolated DC/DC converter

BP5512A

Absolute Maximum Ratings

(Ta=25°C)

Parameter	Symbol	Limits	Unit	Conditions
Input voltage	Vi	8	V	DC
Operating temperature range	Topr	-20 to +85	°C	Refer to derating curve
Storage temperature range	Tstg	-40 to +85	°C	
Allowable maximum surface temperature	Tcmax	105	°C	Ambient temperature + the module self-heating≤Tcmax
Maximum output current	Iomax	200	mA	*1
Withstand voltage	VI	AC2300	V	Between input and output, 1 minute

^{*1} The load should be reduced according to the surrounding temperature, input voltage

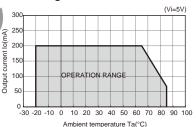
Electrical Characteristics

(Unless otherwise noted, Vi=5.0V, Io=200mA, Ta=25°C)

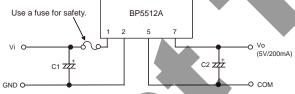
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Input voltage	Vi	4.5	5.0	6.5	V	DC
Output voltage	Vo	4.5	5.0	5.5	V	
Output current	lo	0	-	200	mA	
Line regulation	Vr	-	0.05	0.1	V	Vi=4.5 to 6.5V
Load regulation	VI	-	0.05	0.2	V	Io=50 to 200mA
Output ripple voltage	Vp	-	50	200	mVp-p	
Power conversion efficiency	η	57	62	- (%	

Derating Curve

● Dimensions (Unit: mm)



●Test Circuit



Pin No.	Pin Name	Function			
1	Vi	Input terminal			
2	GND	GND terminal			
3	Non pin	Non pin			
4	Non pin	Non pin			
5	COM	Output common terminal			
6	Non pin	Non pin			
7	Vo	Output terminal			

External Components Settings

F1: Fuse

Use a fuse for safety.

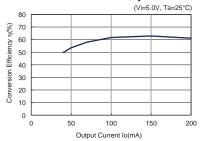
C2: Output capacitor

 $220\mu F$ / 25V Low impedance type for power supply

C2: Output capacitor

 $220\mu\text{F}$ / 25V Low impedance type for power supply

Conversion Efficiency



Notes

No copying or reproduction of this document, in part or in whole, is permitted without the consent of ROHM Co.,Ltd.

The content specified herein is subject to change for improvement without notice.

The content specified herein is for the purpose of introducing ROHM's products (hereinafter "Products"). If you wish to use any such Product, please be sure to refer to the specifications, which can be obtained from ROHM upon request.

Examples of application circuits, circuit constants and any other information contained herein illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.

Great care was taken in ensuring the accuracy of the information specified in this document. However, should you incur any damage arising from any inaccuracy or misprint of such information, ROHM shall bear no responsibility for such damage.

The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM and other parties. ROHM shall bear no responsibility whatsoever for any dispute arising from the use of such technical information.

The Products specified in this document are intended to be used with general-use electronic equipment or devices (such as audio visual equipment, office-automation equipment, communication devices, electronic appliances and amusement devices).

The Products specified in this document are not designed to be radiation tolerant.

While ROHM always makes efforts to enhance the quality and reliability of its Products, a Product may fail or malfunction for a variety of reasons.

Please be sure to implement in your equipment using the Products safety measures to guard against the possibility of physical injury, fire or any other damage caused in the event of the failure of any Product, such as derating, redundancy, fire control and fail-safe designs. ROHM shall bear no responsibility whatsoever for your use of any Product outside of the prescribed scope or not in accordance with the instruction manual.

The Products are not designed or manufactured to be used with any equipment, device or system which requires an extremely high level of reliability the failure or malfunction of which may result in a direct threat to human life or create a risk of human injury (such as a medical instrument, transportation equipment, aerospace machinery, nuclear-reactor controller, fuel-controller or other safety device). ROHM shall bear no responsibility in any way for use of any of the Products for the above special purposes. If a Product is intended to be used for any such special purpose, please contact a ROHM sales representative before purchasing.

If you intend to export or ship overseas any Product or technology specified herein that may be controlled under the Foreign Exchange and the Foreign Trade Law, you will be required to obtain a license or permit under the Law.



Thank you for your accessing to ROHM product informations. More detail product informations and catalogs are available, please contact us.

ROHM Customer Support System

http://www.rohm.com/contact/