

### 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

<sup>\*1</sup> The load should be reduced according to the surrounding temperature, input voltage

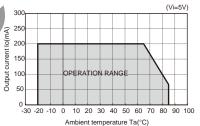
#### Electrical Characteristics

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

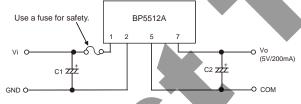
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Input voltage	Vi	4.5	5.0	6.5	V	DC
Output voltage	Vo	4.5	5.0	5.5	V	
Output current	lo	0	-	200	mA	
Line regulation	Vr	-	0.05	0.1	V	Vi=4.5 to 6.5V
Load regulation	VI	-	0.05	0.2	V	Io=50 to 200mA
Output ripple voltage	Vp	-	50	200	mVp-p	
Power conversion efficiency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

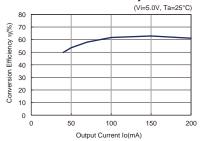
C2: Output capacitor

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

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

#### Conversion Efficiency



#### Notes

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