

## General description

General Application Schottky barrier rectifier, encapsulated in a DFN1006-2L leadless ultra small Surface-Mounted Device (SMD) plastic package.

## Features and benefits

- Average forward current:  $I_{F(AV)} \leq 200 \text{ mA}$
- Reverse voltage:  $V_R \leq 40 \text{ V}$
- Low forward voltage:  $V_F \leq 350 \text{ mV @10mA}$
- Low reverse current:  $I_R \leq 10 \text{ } \mu\text{A}$
- Leadless ultra small SMD plastic package
- We declare that the material of product compliance with RoHS requirements and Halogen Free

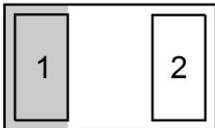
## Application information

- Low voltage rectification
- High efficiency DC-to-DC conversion
- Switch Mode Power Supply (SMPS)
- Reverse polarity protection
- Low power consumption applications

## Ordering information

Device	Package	Marking	Packaging
PSB521BS-40	DFN1006-2L	F	10000/Tape & Reel

## Schematic & Pin configuration

Simplified outline	Graphic symbol
	

**Maximum Ratings** ( $T_A = 25\text{ }^\circ\text{C}$ , unless otherwise specified)

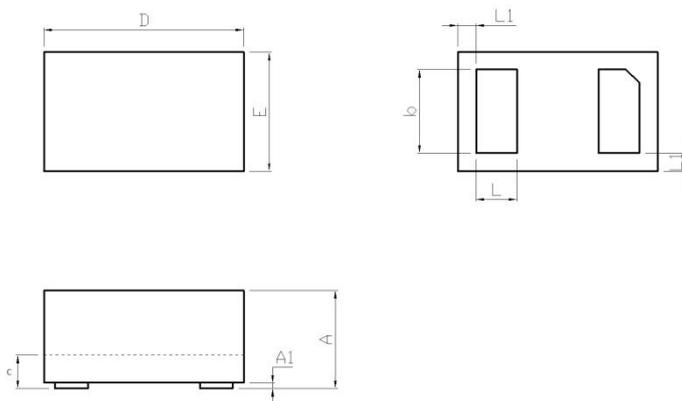
Parameter	Symbol	Value	Unit
DC reverse voltage	$V_R$	40	V
Average rectifierd forward current	$I_O$	200	mA
Forward current surge peak(60Hz · 1cyc)	$I_{FSM}$	500	mA
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +125	$^\circ\text{C}$

**Electrical Characteristics** ( $T_A = 25\text{ }^\circ\text{C}$ , unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Condition
Forward voltage	$V_F$	--	--	0.35 0.40	V	( $I_F=10\text{mA}$ ) ( $I_F=20\text{mA}$ )
Reverse current	$I_R$	--	--	10	$\mu\text{A}$	$V_R=10\text{V}$

**Package Outline Dimensions**

**DFN1006-2L**



SYMBOL	Dimensions In Millimet	
	MIN	MAX
A	0.46	0.50
A1	0	0.05
b	0.45	0.55
c	0.1	0.14
D	0.95	1.05
E	0.55	0.65
L	0.20	0.30
L1	0.035	0.065
h	0.07	0.17