

PSBD2ED40V2H

Schottky Barrier Diode

Feature

- > Small mold type. (DFN1608-2L)
- Low I_R
- High reliability.

Pin1 Pin 2 Top view

Applications

Low current rectification

Construction

Silicon epitaxial planar

Mechanical Characteristics

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- ➤ Qualified max reflow temperature:260°C
- Device meets MSL 1 requirements
- ➤ Pure tin plating: 7 ~ 17 um
- ▶ Pin flatness:≤3mil

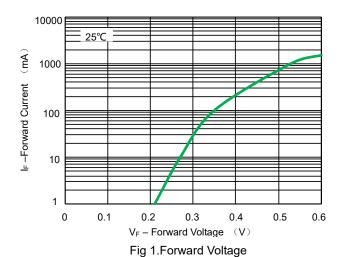
Electrical characteristics per line@25℃

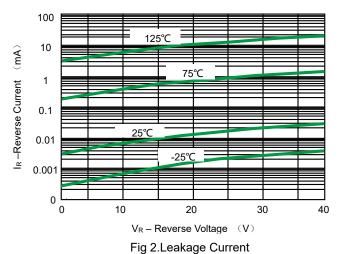
Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Forward voltage	V _F	-	0.53	0.56	V	I _F =1A
Forward voltage	VF	-	0.60	0.65	V	I _F =1.5A
Reverse current	I _R	-	-	50	uA	V _R =40V
Junction Capacitance	Cj	-	150	-	pF	V _R =0V,f =1MHz
Reverse Recovery Time	trr		25		ns	IF=0.5A, IR=1.0A, Irr=0.25A

Absolute maximum rating@25℃

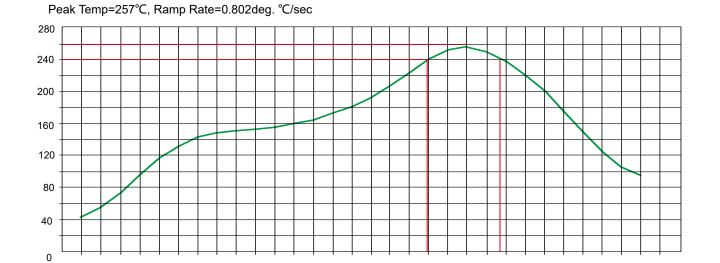
Parameter	Symbol	limits	Unit
Reverse voltage (DC)	V_{RM}	40	V
Average rectified forward current	Io	2	А
Typical Thermal Resistance Junction to Ambient	R _{thja}	80	°C/W
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load	IFSM	12	А
Repetitive Peak Forward Current (Pulse Wave=10ms, Duty Cycle = 25%)	I _{FRM}	5	А
Operating and Storage Temperature Range	T _j ,T _{stg}	-55 to 125	°C

Typical Characteristics



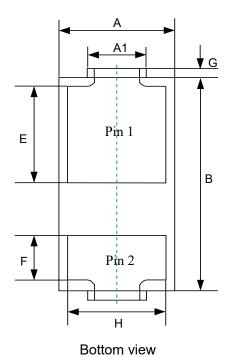


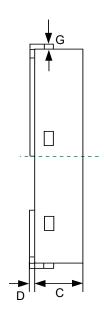
Solder Reflow Recommendation



Time (sec)

Product dimension (DFN1608-2L)





Dim	Millimeters			
Dilli	MIN	MAX		
А	0.75	0.85		
A1	0.00	0.25		
В	1.55	1.65		
С	0.46	0.55		
D	0.00	0.04		
E	0.72	0.80		
F	0.32	0.40		
G	0.00	0.10		
Н	0.67	0.75		

1.00

Notes: This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.

Ordering information

Device	Package	Shipping	
PSBD2ED40V2H	DFN1608-2L(Pb-free)	5000 / Tape & Reel	

Marking



IMPORTANT NOTICE

and Prisemi are registered trademarks of Prisemi Electronics Co., Ltd (Prisemi), Prisemi reserves the right to make changes without further notice to any products herein. Prisemi makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Prisemi assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. "Typical" parameters which may be provided in Prisemi data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. Prisemi does not convey any license under its patent rights nor the rights of others. The products listed in this document are designed to be used with ordinary electronic equipment or devices, Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

Website: http://www.prisemi.com
For additional information, please contact your local Sales Representative.

©Copyright 2009, Prisemi Electronics

Prisemi is a registered trademark of Prisemi Electronics.

All rights are reserved.