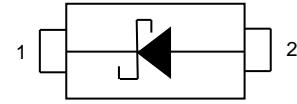


**Feature**

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications


**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

**Absolute maximum rating @25°C**

Parameter	Symbol	PSBDA 20V2	PSBDA 40V2	PSBDA 60V2	PSBDA 80V2	PSBDA 100V2	PSBDA 120V2	PSBDA 150V2	PSBDA 200V2	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	$V_{CC}$	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	50								A
Max Instantaneous Forward Voltage at 2 A	$V_F$	0.55		0.70		0.85		0.95		V

## Absolute maximum rating@25°C

Parameter	Symbol	PSBDA 20V2	PSBDA 40V2	PSBDA 60V2	PSBDA 80V2	PSBDA 100V2	PSBDA 120V2	PSBDA 150V2	PSBDA 200V2	Units
Maximum DC Reverse Current Ta = 25°C at Rated DC Reverse Voltage Ta =100°C	I <sub>R</sub>	0.5 10			0.3 5					mA
Typical Junction Capacitance <sup>(1)</sup>	C <sub>J</sub>	220		80						pF
Typical Junction Resistance <sup>(2)</sup>	R <sub>θJA</sub>	80								°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55~+125								°C
Storage Temperature Range	T <sub>STG</sub>	-55~+150								°C

Notes: 1. Measured at 1MHZ and applied reverse voltage of 4V.D.C

2. P.C.B mounted with 2.0"X2.0" (5X5 cm) copper pad areas.

Typical Characteristics

Fig.1 Forward Current Derating Curve

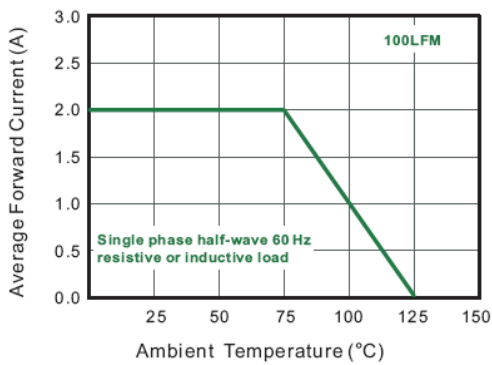


Fig.2 Typical Reverse Characteristics

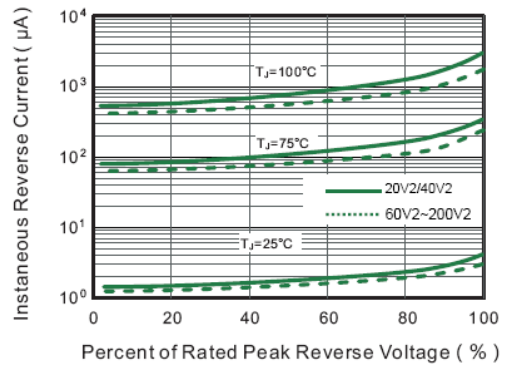


Fig.3 Typical Forward Characteristic

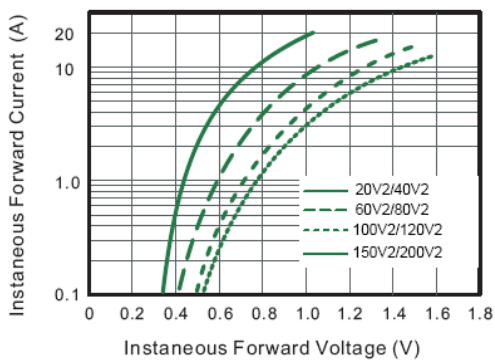


Fig.4 Typical Junction Capacitance

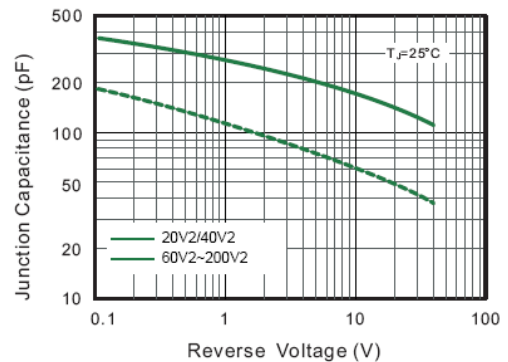
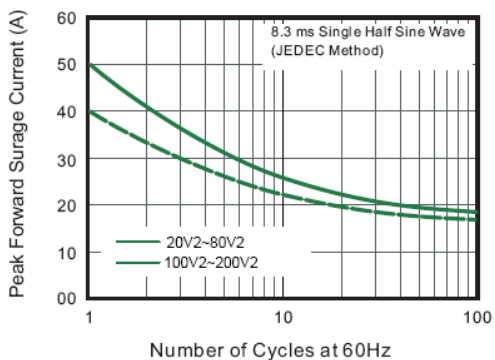
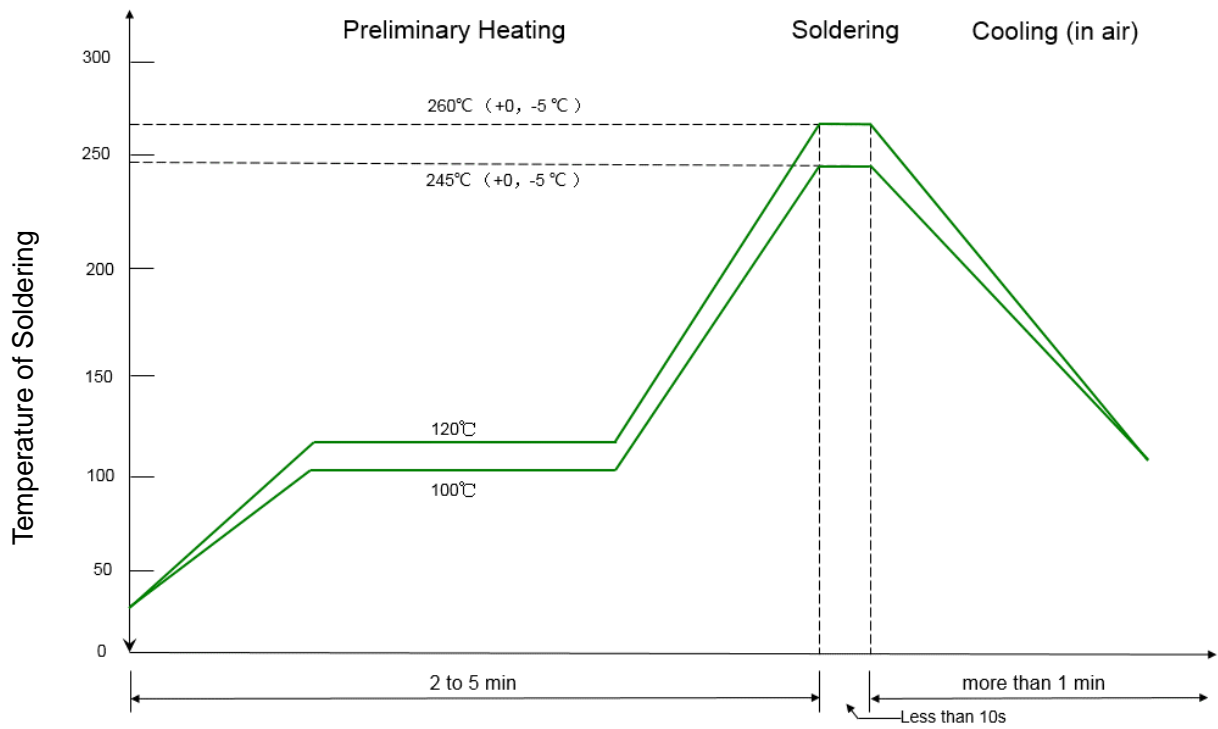


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

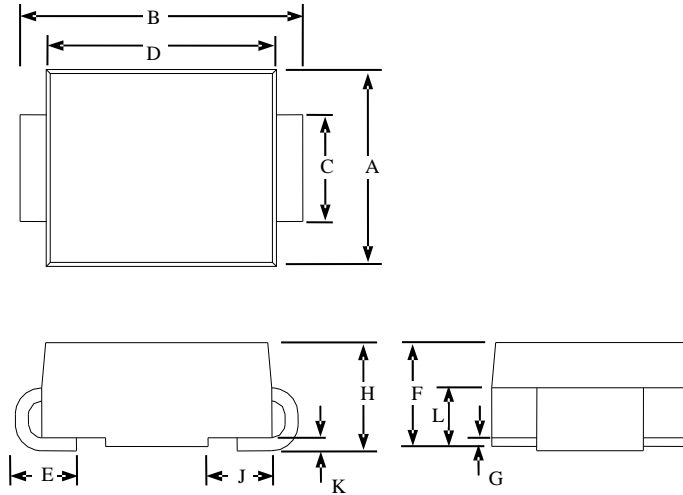


Solder Reflow Recommendation

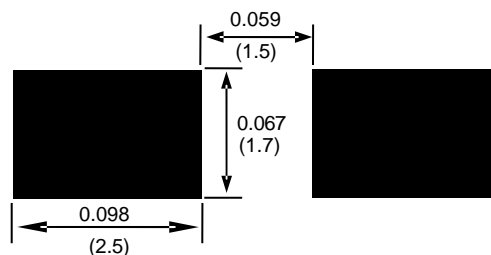


Remark: Pb free for 260°C; Pb for 245°C.

Product dimension(SMA)



Dimension	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.086	0.110	2.18	2.79
B	0.185	0.209	4.70	5.31
C	0.051	0.067	1.29	1.70
D	0.160	0.180	4.06	4.57
E	0.036	0.056	0.91	1.42
F	0.069	0.087	1.75	2.20
G	0.002	0.008	0.05	0.20
H	0.069	0.091	1.75	2.31
J	0.035	0.053	0.89	1.35
K	0.008	0.014	0.20	0.35
L	0.039	0.049	0.99	1.24




Suggested PCB Layout

DIMENSIONS ARE :  $\frac{\text{INCHES}}{\text{(Millimeters)}}$

Ordering information

Device	Package	Reel	MPQ
PSBDAXXXV2	SMA(Pb-Free)	13"	5000/ Tape & Reel


**IMPORTANT NOTICE**

 and **Prisemi**<sup>®</sup> 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**<sup>®</sup> is a registered trademark of Prisemi Electronics.

All rights are reserved.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Schottky Diodes & Rectifiers](#) category:*

*Click to view products by [Prisemi](#) manufacturer:*

Other Similar products are found below :

[MA4E2039](#) [MA4E2508M-1112](#) [MBR0530L-TP](#) [MBR10100CT-BP](#) [MBR1545CT](#) [MMBD301M3T5G](#) [RB160M-50TR](#)  
[BAS16E6433HTMA1](#) [BAS 3010S-02LRH E6327](#) [BAT 54-02LRH E6327](#) [IDL02G65C5XUMA1](#) [NSR05F40QNXT5G](#) [NSVR05F40NXT5G](#)  
[NTE555](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SK310-T](#) [SK33A-TP](#) [SK34B-TP](#) [SS3003CH-TL-E](#) [PDS3100Q-7](#) [GA01SHT18](#)  
[CRS10I30A\(TE85L,QM](#) [MA4E2501L-1290](#) [MBRB30H30CT-1G](#) [JANTX1N5712-1](#) [SB007-03C-TB-E](#) [SK33B-TP](#) [SK35A-TP](#) [SK38B-LTP](#)  
[NTE505](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#) [CRG04\(T5L,TEMQ\)](#) [ACDBA1100LR-HF](#) [ACDBA1200-HF](#) [ACDBA240-HF](#)  
[ACDBA3100-HF](#) [CDBQC0530L-HF](#) [ACDBA260LR-HF](#) [ACDBA1100-HF](#) [MA4E2502L-1246](#) [10BQ015-M3/5BT](#) [10BQ060-M3/5BT](#)  
[NRVB130LSFT1G](#) [CRS08TE85LQM](#) [PMAD1108-LF](#) [B120Q-13-F](#) [1N5819T-G](#) [B0530WSQ-7-F](#)