

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED


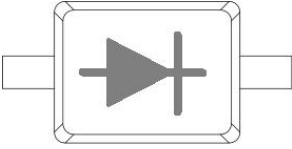


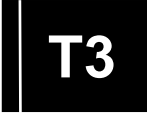
## BAV19WS~BAV21WS

Product specification

## FEATURES

- Low Reverse Current
- Surface Mount Package Ideally Suited for Automatic Insertion
- Fast Switching Speed
- For General Purpose Switching Applications

## Reference News

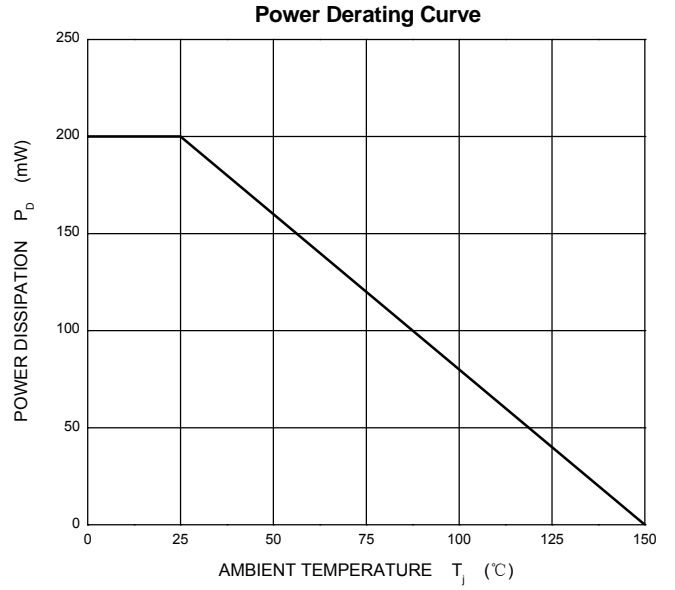
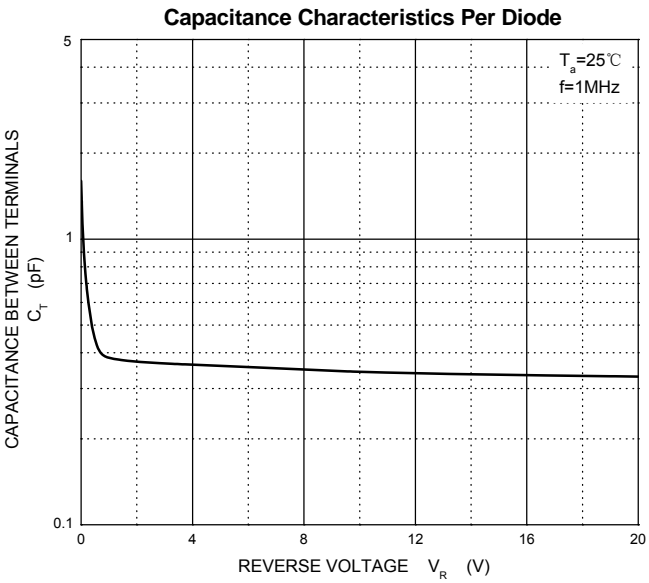
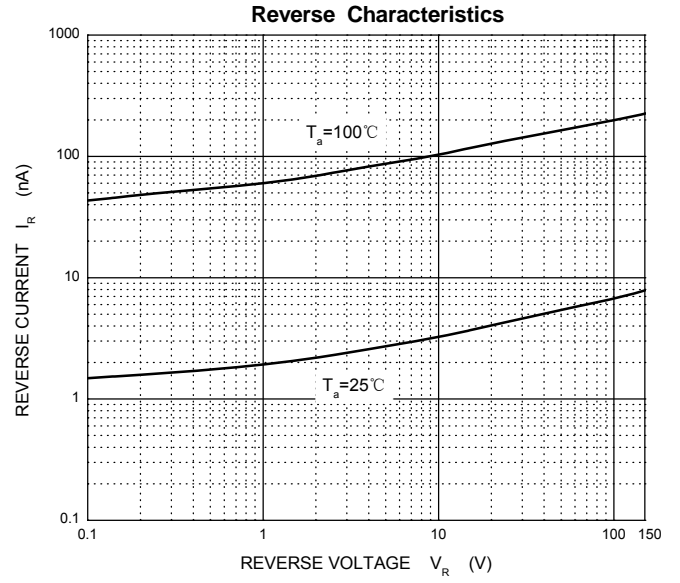
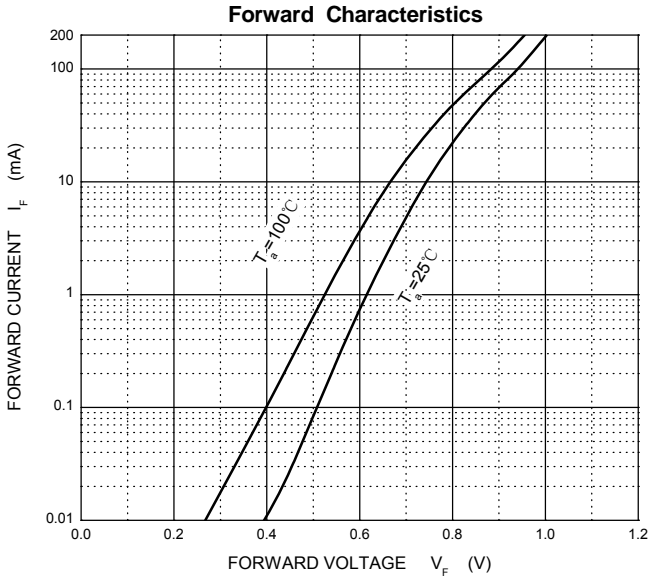
PACKAGE OUTLINE	PIN CONFIGURATION	BAV19WS	BAV20WS	BAV21WS
				
SOD-323		MARKING:A8	MARKING:T2	MARKING:T3

## MAXIMUM RATINGS ( Ta=25°C unless otherwise noted )

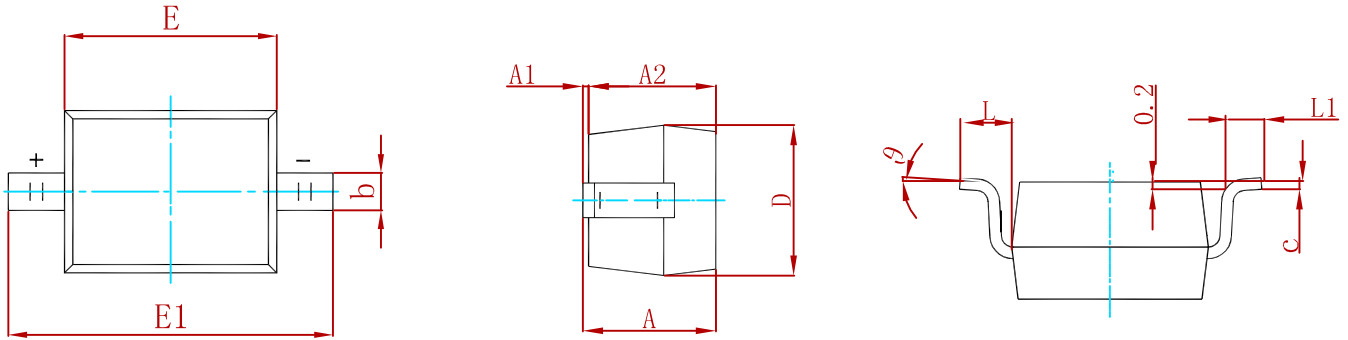
Symbol	Parameter	Value			Unit
		BAV19WS	BAV20WS	BAV21WS	
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	120	200	250	V
$V_{RRM}$	Peak Repetitive Reverse Voltage	100	150	200	V
$V_{RWM}$	Working Peak Reverse Voltage				
$V_{R(RMS)}$	RMS Reverse Voltage	71	106	141	V
$I_o$	Average Rectified Output Current	200			mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current @ t=8.3ms	2.0			A
$I_{FRM}$	Repetitive Peak Forward Surge Current	625			mA
$P_D$	Power Dissipation	250			mW
$R_{JA}$	Thermal Resistance from Junction to Ambient	500			°C/W
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55~+150			°C

## ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Reverse current	IR	VR=100V	BAV19WS			0.1	uA
		VR=150V	BAV20WS			0.1	
		VR=200V	BAV21WS			0.1	
Forward voltage	VF	IF=100mA				1	V
		IF=200mA				1.25	
Total capacitance	Ctot	VR=0V, f=1MHz				5	pF
Reverse recovery time	trr	IF= IR =30mA, Irr=0.1*IR , RL=100Ω				50	ns

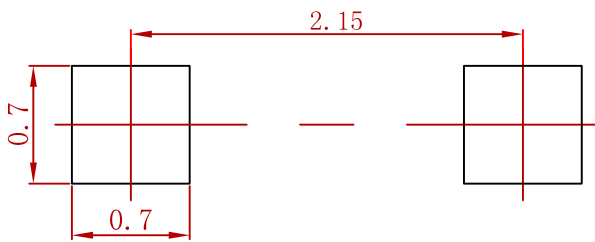


**PACKAGE MECHANICAL DATA**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

**Suggested Pad Layout**



- Note:**
1. Controlling dimension: in millimeters.
  2. General tolerance:  $\pm 0.05$  mm.
  3. The pad layout is for reference purposes only.

**REEL SPECIFICATION**

P/N	PKG	QTY
BAV19WS~BAV21WS	SOD-323	3000

## Attention

- Any and all MSKSEMI Semiconductor products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your MSKSEMI Semiconductor representative nearest you before using any MSKSEMI Semiconductor products described or contained herein in such applications.
- MSKSEMI Semiconductor assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all MSKSEMI Semiconductor products described or contained herein.
- Specifications of any and all MSKSEMI Semiconductor products described or contained herein stipulate the performance, characteristics, and functions of the described products in the independent state, and are not guarantees of the performance, characteristics, and functions of the described products as mounted in the customer's products or equipment. To verify symptoms and states that cannot be evaluated in an independent device, the customer should always evaluate and test devices mounted in the customer's products or equipment.
- MSKSEMI Semiconductor strives to supply high-quality high-reliability products. However, any and all semiconductor products fail with some probability. It is possible that these probabilistic failures could give rise to accidents or events that could endanger human lives, that could give rise to smoke or fire, or that could cause damage to other property. When designing equipment, adopt safety measures so that these kinds of accidents or events cannot occur. Such measures include but are not limited to protective circuits and error prevention circuits for safe design, redundant design, and structural design.
- In the event that any or all MSKSEMI Semiconductor products (including technical data, services) described or contained herein are controlled under any of applicable local export control laws and regulations, such products must not be exported without obtaining the export license from the authorities concerned in accordance with the above law.
- No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written permission of MSKSEMI Semiconductor.
- Information (including circuit diagrams and circuit parameters) herein is for example only ; it is not guaranteed for volume production. MSKSEMI Semiconductor believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.
- Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. When designing equipment, refer to the "Delivery Specification" for the MSKSEMI Semiconductor product that you intend to use.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Diodes - General Purpose, Power, Switching category:](#)*

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

Other Similar products are found below :

[MCL4151-TR3](#) [MMBD3004S-13-F](#) [RD0306T-H](#) [1N3611](#) [NTE156A](#) [NTE574](#) [NTE6244](#) [1SS193,LF](#) [1SS400CST2RA](#) [SDAA13](#)  
[SHN2D02FUTW1T1G](#) [LS4151GS08](#) [1N4449](#) [1N456A](#) [1N4934-E3/73](#) [1N914BTR](#) [RFUH20TB3S](#) [D291S45T](#) [BAV300-TR](#) [BAW56DWQ-](#)  
[7-F](#) [BAW75-TAP](#) [MM230L-CAA](#) [IDW40E65D1](#) [JAN1N3600](#) [JAN1N4454UR-1](#) [LL4151-GS18](#) [SMMSD4148T3G](#) [BYW95B/A52A](#)  
[NSVDAN222T1G](#) [CDSZC01100-HF](#) [LL4150-M-08](#) [1N4454-TR](#) [BAV70HDW-7](#) [BAS28-7](#) [JANTX1N6640](#) [BAW56HDW-13](#) [BAS28 TR](#)  
[VS-HFA04SD60STR-M3](#) [NSVM1MA152WKT1G](#) [1SS388-TP](#) [RGP30D-E3/73](#) [VS-8EWF02S-M3](#) [BAV99TQ-13-F](#) [BAV99HDW-13](#)  
[MMDB30-E28X](#) [IDP20C65D2XKSA1](#) [LS4148](#) [IDV15E65D2](#) [NSVM1MA152WAT1G](#) [HN4D02JU\(TE85L,F\)](#)