

SWITCHING DIODE

Parameter	Value	Unit
I_o	200	mA
P_D	500	mW



FEATURES

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

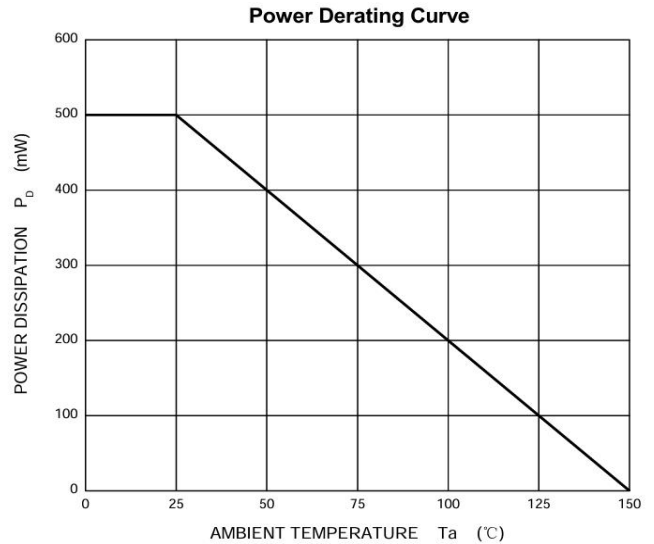
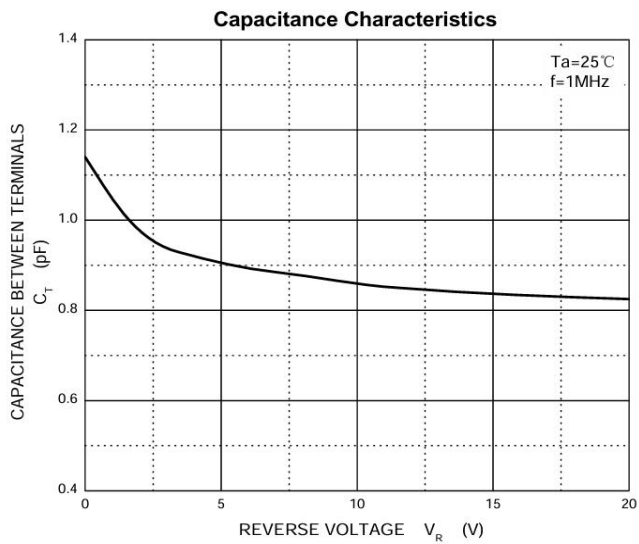
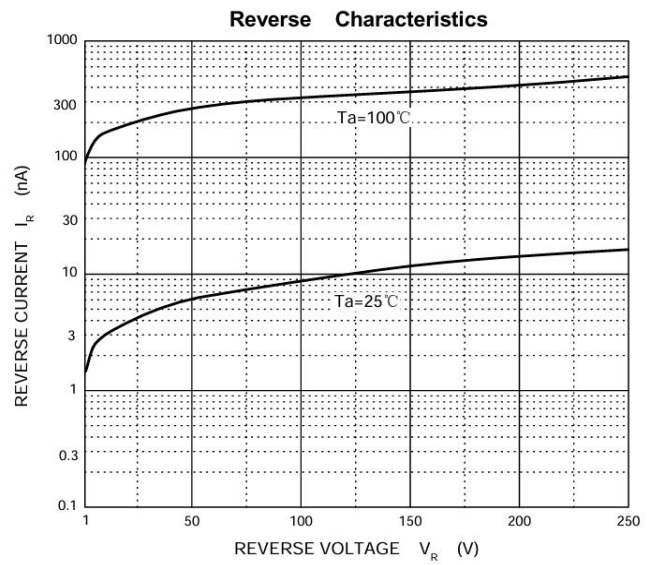
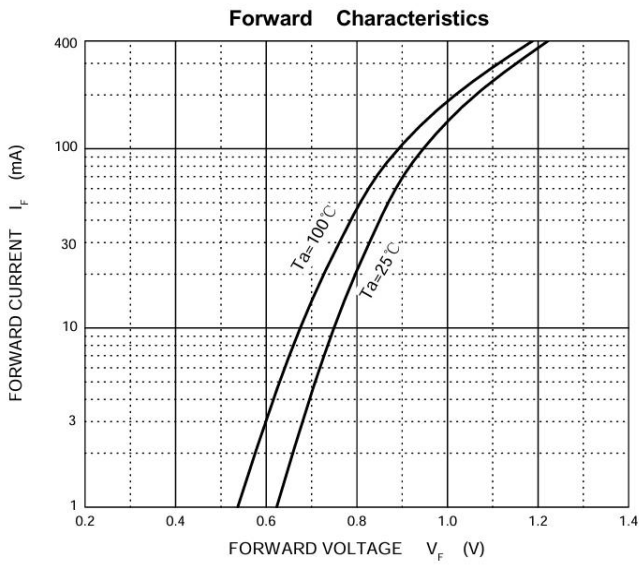
ABSOLUTE MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value			Unit
		BAV19W	BAV20W	BAV21W	
V_{rm}	Non-Repetitive Peak Reverse Voltage	120	200	250	V
V_{rrm}	Peak Repetitive Peak Reverse Voltage	100	150	200	V
V_{rwm}	Working Peak Reverse Voltage				
$V_{r(rms)}$	RMS Reverse Voltage	71	106	141	
I_o	Average Rectified Output Current	200			mA
I_{fsm}	Non-Repetitive Peak Forward Surge Current(tp=8.3ms)	2.0			A
P_d	Power Dissipation	500			mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient(Note 1)	250			°C/W
T_j, T_{stg}	Operation Junction and Storage Temperature Range	-55 to 150			°C

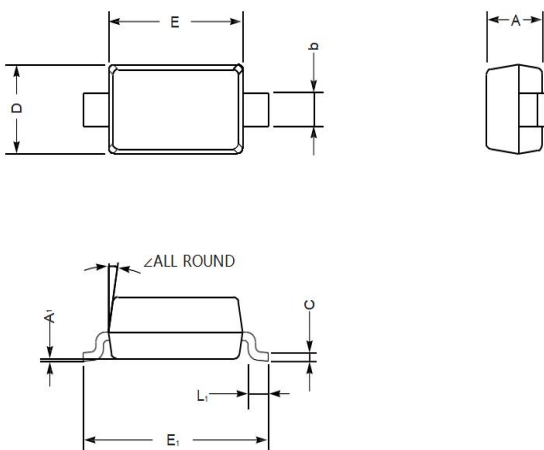
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Forward current	IR	VR=100V BAV19W			0.1	μA
		VR=150V BAV20W			0.1	
		VR=200V BAV21W			0.1	
Reverse voltage	VF	IF=100mA			1	V
		IF=200mA			1.25	
Capacitance between terminals	Ctot	VR=0V, f=1MHz			5	pF
Reverse recovery time	trr	IF=IR=10mA Irr=0.1XIR, RL=100Ω			50	ns

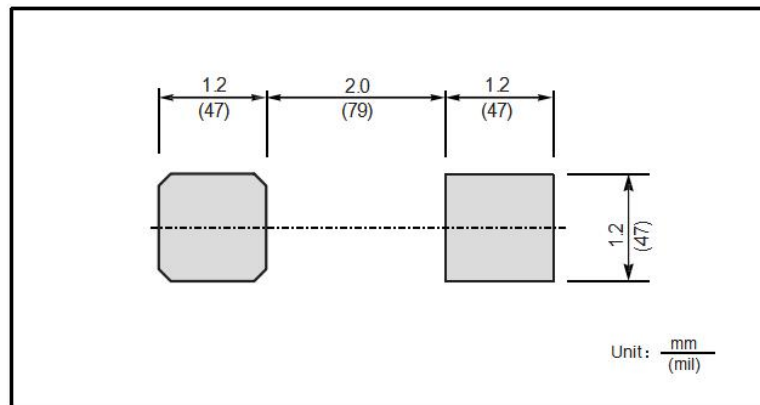
TYPICAL CHARACTERISTICS



PACKAGE OUTLINE



UNIT		A	C	D	E	E_1	L_1	b	A_1	\angle
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5		
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20		

The recommended mounting pad size***Important Usage Information and Disclaimer**

The specifications of Zhuhai Hypersemi Co., Ltd. products are not guarantees of product characteristics. They reflect typical performance expected in standard applications, which may vary with specific uses. Users must conduct prior testing for their applications and make necessary adjustments.

Users are responsible for the safety of applications utilizing our products and must implement adequate safety measures to prevent physical injury, fire, or other risks in case of product failure. It is the user's duty to ensure that application designs comply with all applicable laws and standards. Our products must not be used in any applications where a product failure could reasonably result in personal injury, unless specifically authorized in a signed document by Zhuhai Hypersemi Co., Ltd.

No representations or warranties are made regarding the accuracy or completeness of this information, including any claims of non-infringement of third-party intellectual property rights. Zhuhai Hypersemi Co., Ltd. assumes no liability for any applications or uses of its products and does not grant any licenses to its intellectual property rights or those of others. We also make no claims regarding non-infringement of third-party intellectual property rights that may arise from applications.

Due to technical requirements, our products may contain hazardous substances. For details, please contact your nearest sales office. This document replaces all previous information and may be updated. We reserve the right to make changes.