

# BAV19-21W

## Surface mount switching diode

### Features

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- For general purpose switching applications
- RoHS compliant package

### Mechanical Data

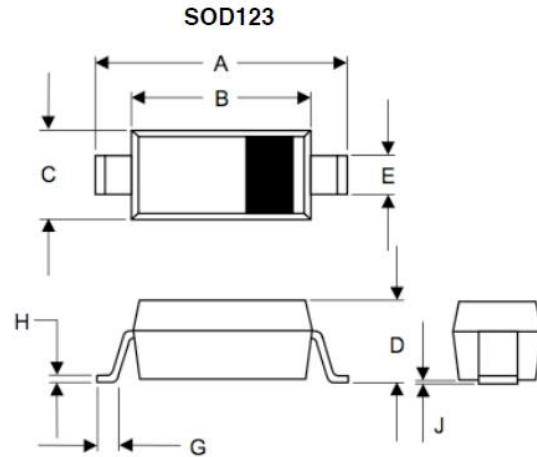
- Surface mount fast switching diode

### Packing & Order Information

3,000/Reel



**RoHS  
COMPLIANT**



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	----	.053	----	1.35	
E	.012	.031	0.30	.78	
G	.006	----	0.15	----	
H	----	.01	----	.25	
J	----	.006	----	.15	

### Graphic symbol



### ORDERING INFORMATION

Type No.	Marking	Package Code
BAV19W	A8	SOD-123
BAV20W	T2	SOD-123
BAV21W	T3	SOD-123

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

#### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	BAV19W	BAV20W	BAV21W	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	120	200	250	V
Peak repetitive peak reverse voltage	$V_{RRM}$				
Working peak	$V_{RWM}$	100	150	200	V
DC Blocking voltage	$V_R$				

## BAV19-21W

Surface mount switching diode

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	BAV19W	BAV20W	BAV21W	Unit
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	141	V
Forward Continuous Current	$I_{FM}$	400			mA
Average Rectified Output Current	$I_D$	200			mA
Non-Repetitive Peak Forward Surge Current @t=1.0 $\mu$ s @t=1.0 s	$I_{FSM}$	2.5 0.5			A
Repetitive Peak Forward Surge Current	$I_{FRM}$	625			mA
Power Dissipation	$P_D$	250			mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500			°C/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150			°C

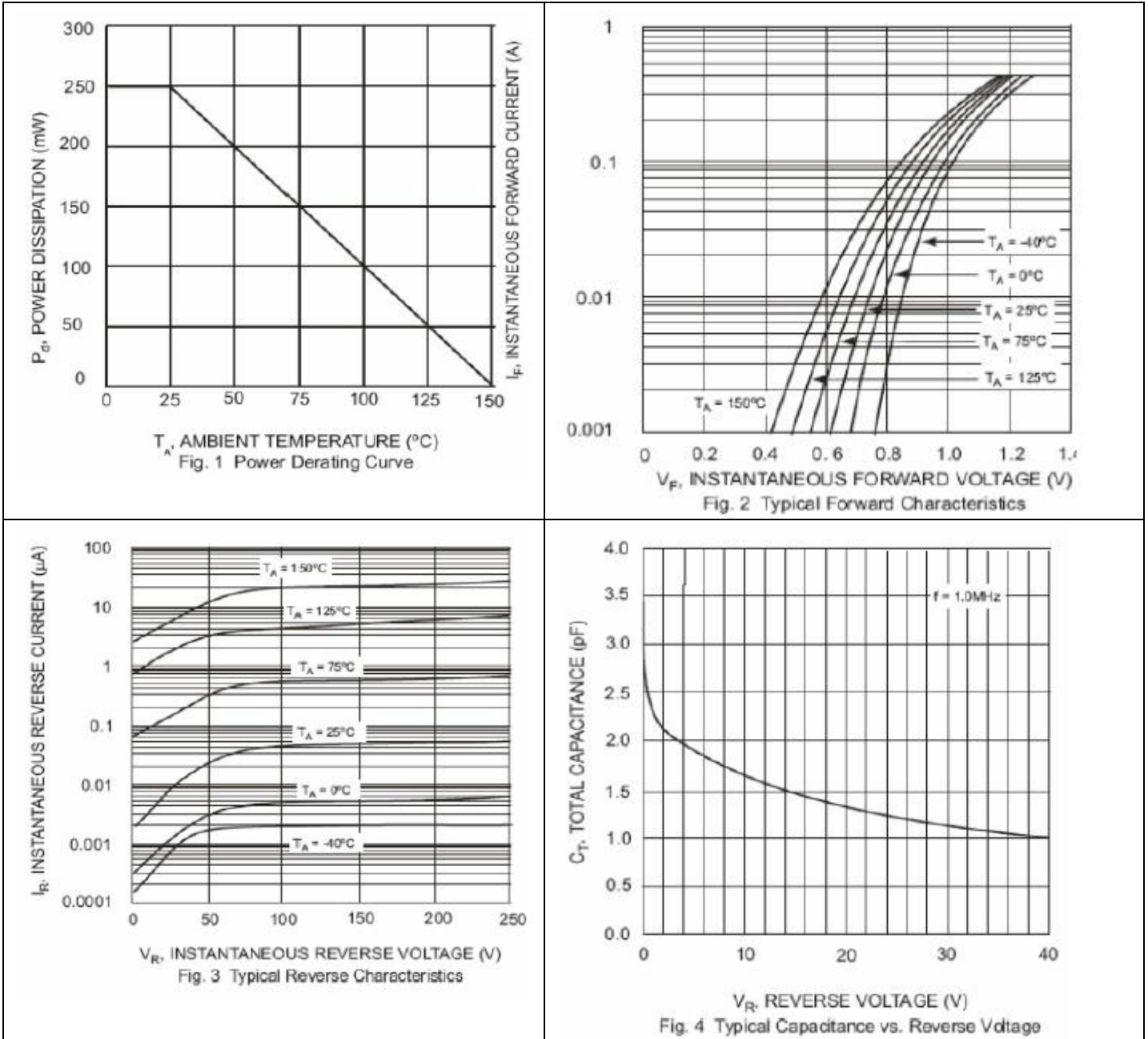
### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Conditions	Symbol	Min	Max	Unit
Maximum Forward Voltage	IF=100mA	$V_{F1}$	--	1.0	V
	IF=200mA	$V_{F2}$	--	1.25	
Reverse Current BAV19W BAV20W BAV21W	VR=100V VR=150V VR=200V	$I_R$	--	0.1	$\mu$ A
Junction Capacitance	VR=0, f=1.0MHz	$C_j$	--	5.0	pF
Reverse Recovery Time	IF=IR=30mA, Irr=0.1×IR, RL=100 $\Omega$	$T_{RR}$	--	50	ns

## BAV19-21W

Surface mount switching diode

■ TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified



## BAV19-21W

Surface mount switching diode

### Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Bruckewell Technology Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Bruckewell"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Bruckewell makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Bruckewell disclaims

- (i) Any and all liability arising out of the application or use of any product.
- (ii) Any and all liability, including without limitation special, consequential or incidental damages.
- (iii) Any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Bruckewell's knowledge of typical requirements that are often placed on Bruckewell products in generic applications.

Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time.

Product specifications do not expand or otherwise modify Bruckewell's terms and conditions of purchase, including but not limited to the warranty expressed therein.