

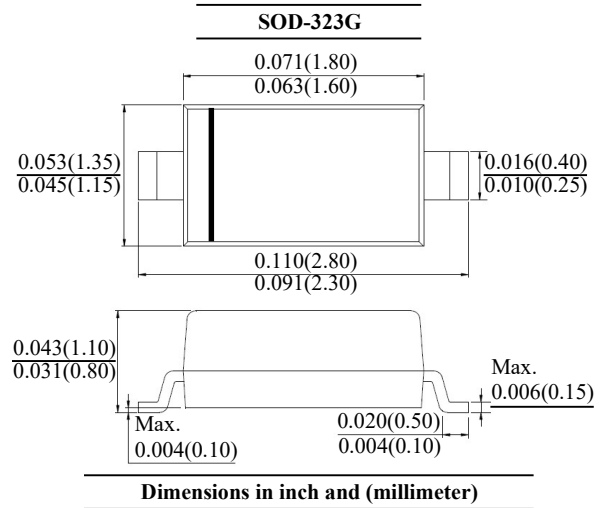


# ABAV21WSGH

## SWITCHING DIODE

### FEATURES

- Fast Switching Diode
- AEC-Q101 Qualified
- Suffix "H" indicates Halogen-free parts, ex. ABAV21WSGH.



### Maximum Ratings ( $T_A=25\text{ }^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	250	V
Reverse Voltage	$V_R$	200	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Forward Continuous Current	$I_{FM}$	400	mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	at $t=100\mu\text{s}$	3.0
		at $t=1\text{ms}$	2.3
		at $t=10\text{ms}$	1.7
		at $t=1\text{s}$	0.5
Power Dissipation	$P_D$	200	mW
Thermal Resistance from Junction to Ambient (Note 1)	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Operating Junction Temperature	$T_J$	-65 to +150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65 to +150	$^\circ\text{C}$

Note :

Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

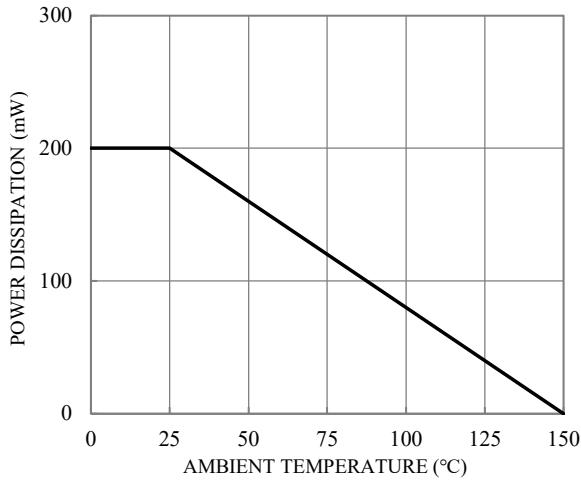
### Electrical Characteristics ( $T_A=25\text{ }^\circ\text{C}$ unless otherwise specified)

Parameter	Test Condition	Symbol	Min.	Max.	Units
Breakdown Voltage	$I_R=100\mu\text{A}$	$V_{(BR)R}$	250	-	V
Reverse Leakage Current	$V_R=200\text{V}$	$I_R$	-	100	nA
Forward Voltage	$I_F=100\text{mA}$	$V_F$	-	1.00	V
	$I_F=200\text{mA}$		-	1.25	
Capacitance	$V_R=0\text{V}$ , $f=1\text{MHz}$	$C_T$	-	5	pF
Reverse Recovery Time	$I_F=I_R=30\text{mA}$ , $I_{RR}=0.1 \times I_R$ , $R_L=100\Omega$	$t_{rr}$	-	50	ns

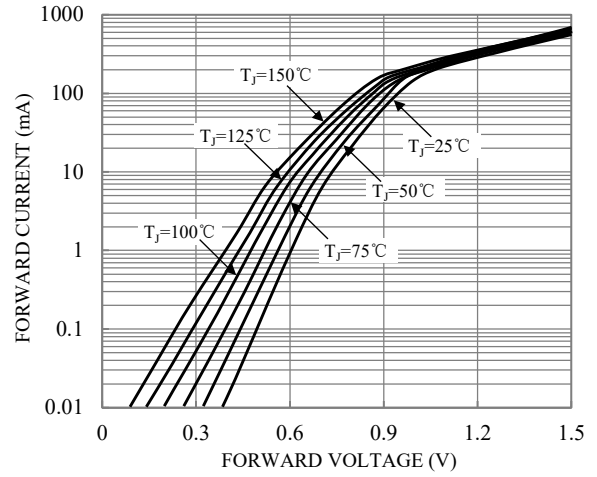


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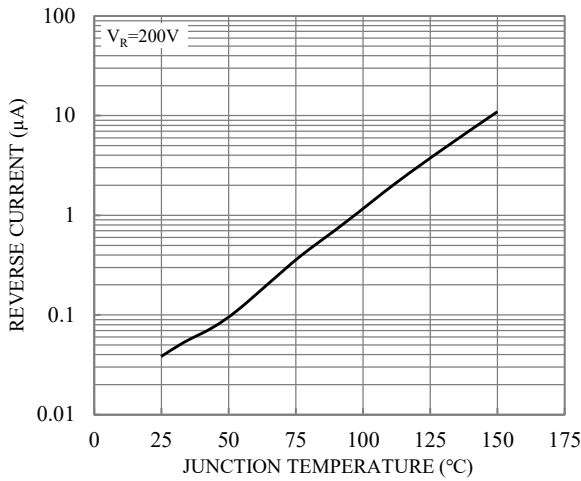
## RATINGS AND CHARACTERISTIC CURVES



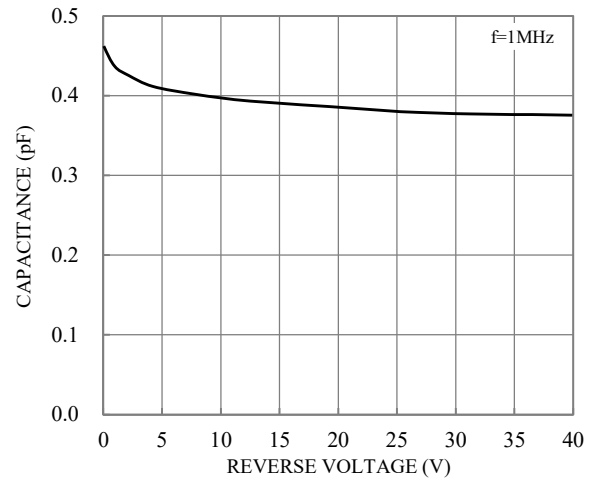
**Fig. 1 POWER DERATING CURVE**



**Fig. 2 FORWARD CHARACTERISTIC CURVE**



**Fig. 3 REVERSE CHARACTERISTIC CURVE**

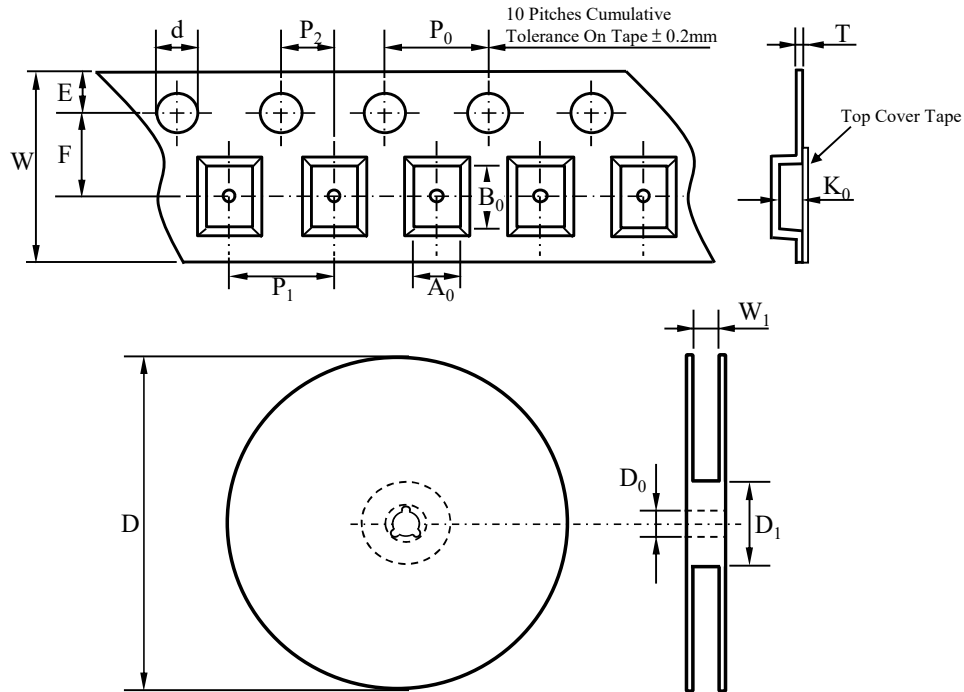


**Fig. 4 CAPACITANCE**



# ABAV21WSGH SWITCHING DIODE

## TAPE & REEL SPECIFICATION



Unit: mm

Item	Symbol	SOD-323G
Carrier width	$A_0$	*
Carrier length	$B_0$	
Carrier depth	$K_0$	
Sprocket hole	d	$1.50 \pm 0.10$
Reel outside diameter	D	$178.00 \pm 2.00$
Feed hole width	$D_0$	$13.00 \pm 0.50$
Reel inner diameter	$D_1$	MIN. 50.00
Sprocket hole position	E	$1.75 \pm 0.10$
Punch hole position	F	$3.50 \pm 0.10$
Sprocket hole pitch	$P_0$	$4.00 \pm 0.10$
Punch hole pitch	$P_1$	$4.00 \pm 0.10$
Embossment center	$P_2$	$2.00 \pm 0.10$
Overall tape thickness	T	MAX. 0.60
Tape width	W	$8.00 \pm 0.20$
Reel width	W1	MAX. 10.00

Note \*:  $A_0$ ,  $B_0$ , and  $K_0$  are determined by component size. The clearance between the components and the cavity must be within 0.05 mm min. to 0.5 mm max.

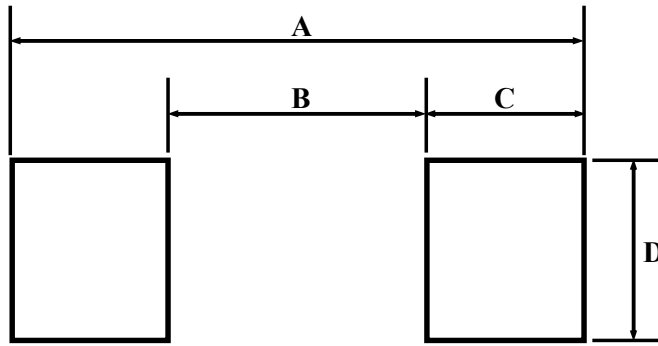
## ORDER INFORMATION

Part Number	Marking Code	Reel Size	Quantity
ABAV21WSGH	WO	7"	3,000



# ABAV21WSGH SWITCHING DIODE

## SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D
SOD-323G	2.90	1.30	0.80	0.90