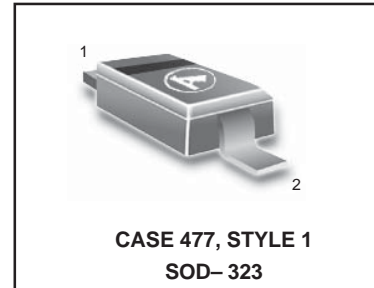


# HIGH VOLTAGE SWITCHING DIODE

**LBAS21HT1G**  
**S-LBAS21HT1G**

- We declare that the material of product compliance with RoHS requirements.
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.



## ORDERING INFORMATION

Device	Marking	Shipping
LBAS21HT1G S-LBAS21HT1G	JS	3000/Tape&Reel
LBAS21HT3G S-LBAS21HT3G	JS	10000/Tape&Reel



## MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	$V_R$	250	Vdc
Peak Forward Current	$I_F$	200	mAdc
Peak Forward Surge Current	$I_{FM(surge)}$	625	mAdc

## THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board,* $T_A = 25^\circ\text{C}$	$P_D$	200	mW
Derate above $25^\circ\text{C}$		1.57	mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	635	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature Range	$T_J, T_{stg}$	-55 to +150	$^\circ\text{C}$

\*FR-5 Minimum Pad

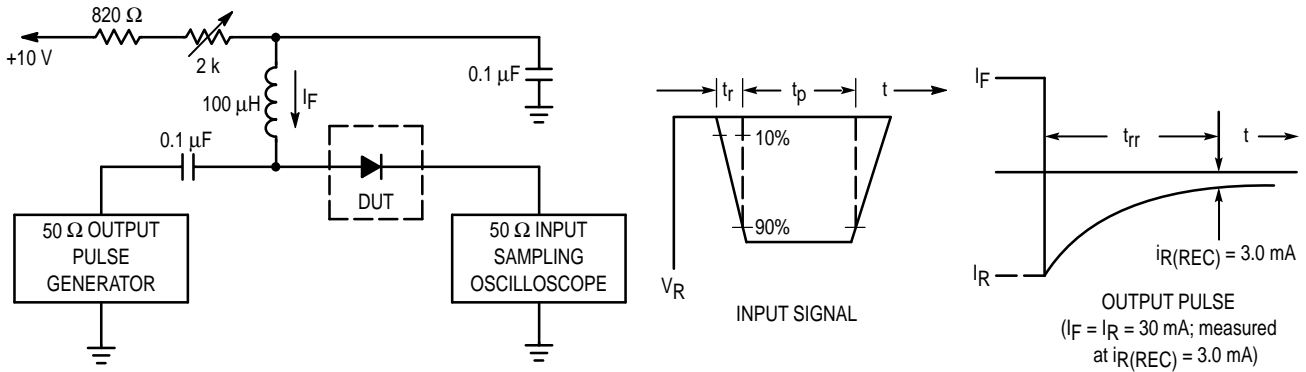
## ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
----------------	--------	-----	-----	------

## OFF CHARACTERISTICS

Reverse Voltage Leakage Current ( $V_R = 200$ Vdc) ( $V_R = 200$ Vdc, $T_J = 150^\circ\text{C}$ )	$I_R$	-	0.1 100	$\mu\text{Adc}$
Reverse Breakdown Voltage ( $I_{BR} = 100$ $\mu\text{Adc}$ )	$V_{(BR)}$	250	-	Vdc
Forward Voltage ( $I_F = 100$ mAdc) ( $I_F = 200$ mAdc)	$V_F$	-	1000 1250	mV
Diode Capacitance ( $V_R = 0$ , $f = 1.0$ MHz)	$C_D$	-	5.0	pF
Reverse Recovery Time ( $I_F = I_R = 30$ mAdc, $R_L = 100$ $\Omega$ )	$t_{rr}$	-	50	ns

LBAS21HT1G , S-LBAS21HT1G



- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current ( $I_F$ ) of 30 mA.  
 2. Input pulse is adjusted so  $I_{R(peak)}$  is equal to 30 mA.  
 3.  $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

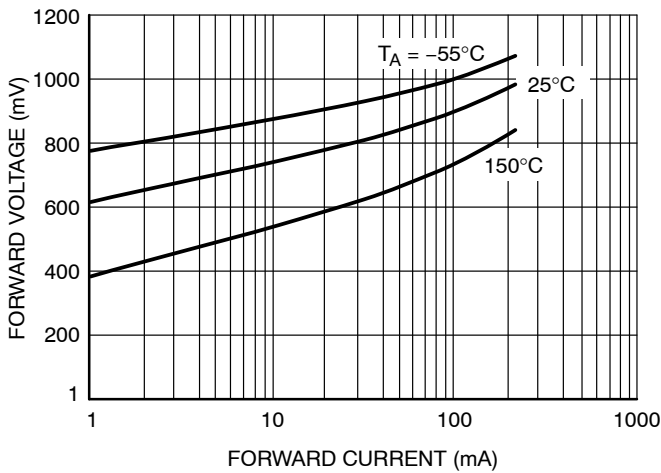


Figure 2. Forward Voltage

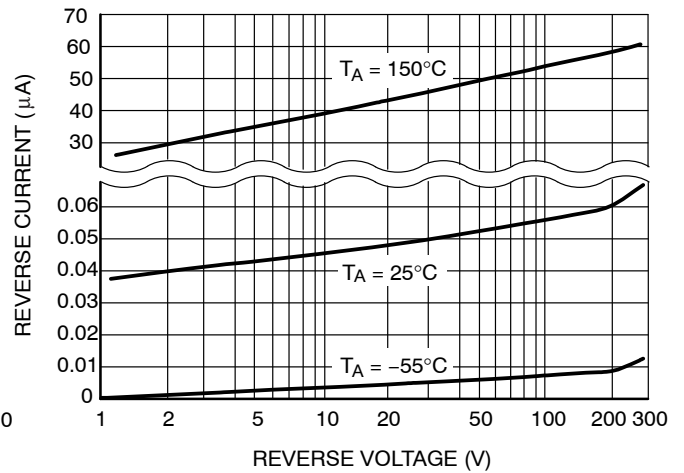
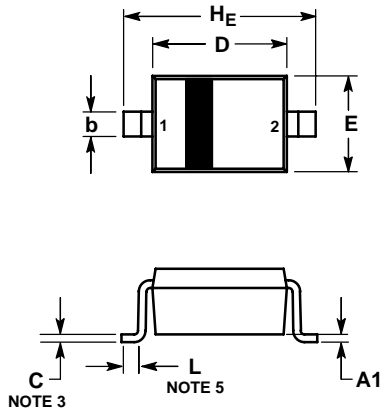


Figure 3. Reverse Leakage

LBAS21HT1G , S-LBAS21HT1G

SOD-323



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. LEAD THICKNESS SPECIFIED PER L/F DRAWING WITH SOLDER PLATING.
4. DIMENSIONS A AND B DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.
5. DIMENSION L IS MEASURED FROM END OF RADIUS.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.031	0.035	0.040
A1	0.00	0.05	0.10	0.000	0.002	0.004
A3	0.15 REF			0.006 REF		
b	0.25	0.32	0.4	0.010	0.012	0.016
C	0.089	0.12	0.177	0.003	0.005	0.007
D	1.60	1.70	1.80	0.062	0.066	0.070
E	1.15	1.25	1.35	0.045	0.049	0.053
L	0.08			0.003		
HE	2.30	2.50	2.70	0.090	0.098	0.105

SOLDERING FOOTPRINT\*

