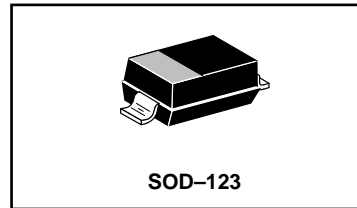


HIGH VOLTAGE SWITCHING DIODE

LBAV21T1G
S-LBAV21T1G

- 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
LBAV21T1G S-LBAV21T1G	JS	3000/Tape&Reel
LBAV21T3G S-LBAV21T3G	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	250	mW
Derate above 25°C		2	mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature Range	T_J, T_{stg}	-55 to +150	$^\circ\text{C}$

*FR-5 Minimum Pad

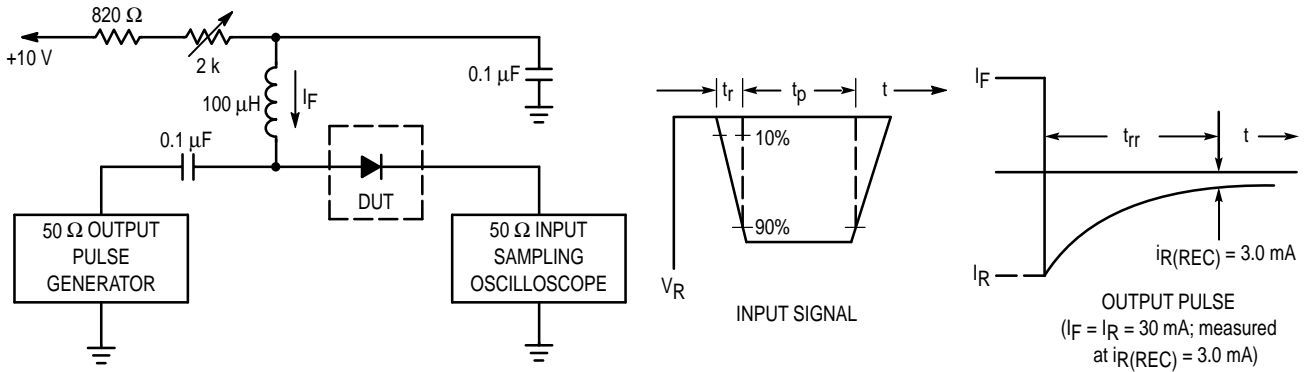
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
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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	μAdc
Reverse Breakdown Voltage ($I_{BR} = 100$ μAdc)	$V_{(BR)}$	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, $R_L = 100$ Ω)	t_{rr}	-	50	ns

LBAV21T1G,S-LBAV21T1G



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

Figure 1. Recovery Time Equivalent Test Circuit

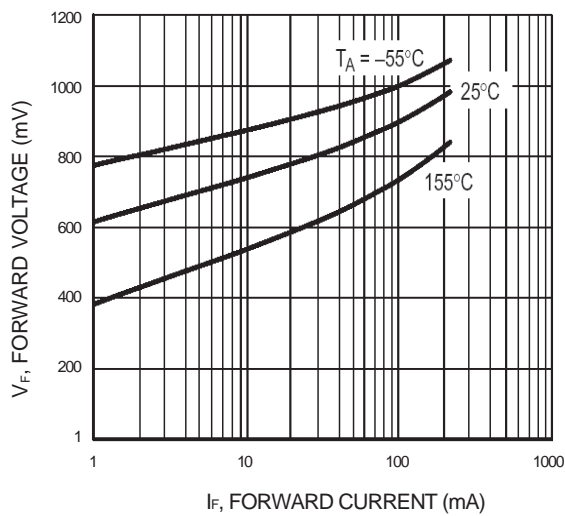


Figure 1. Forward Voltage

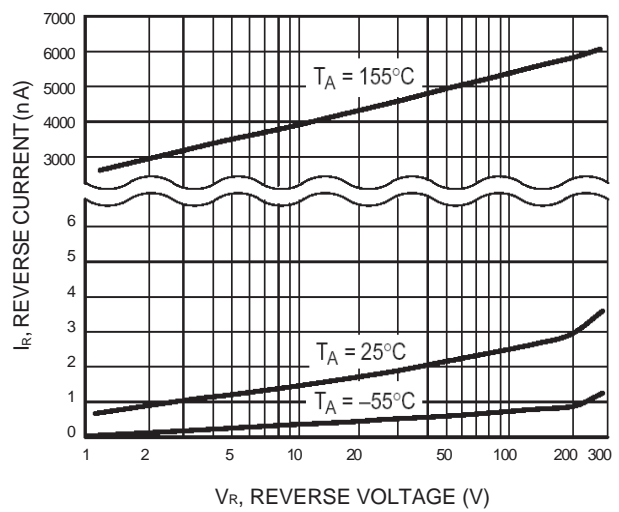
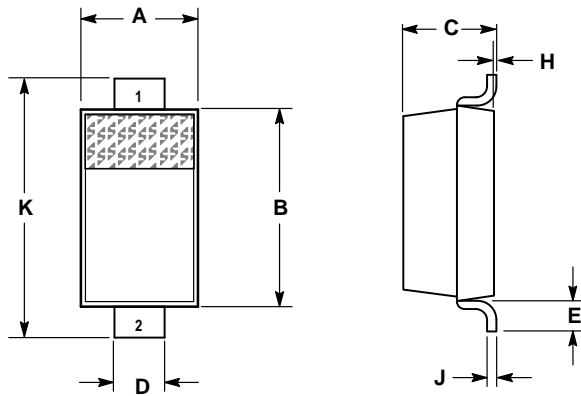


Figure 2. Reverse Leakage

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PACKAGE DIMENSIONS

SOD-123

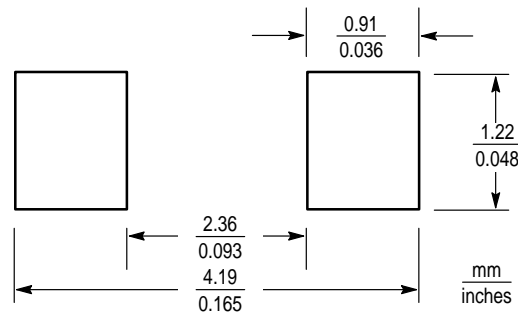


NOTES:
 1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
 2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.071	1.40	1.80
B	0.100	0.112	2.55	2.85
C	0.037	0.053	0.95	1.35
D	0.020	0.028	0.50	0.70
E	0.004	—	0.25	—
H	0.000	0.004	0.00	0.10
J	—	0.006	—	0.15
K	0.140	0.152	3.55	3.85

STYLE 1:
 PIN 1. CATHODE
 2. ANODE

RECOMMENDED FOOTPRINT FOR SOD-123



SOD-123