

## HIGH VOLTAGE SURFACE MOUNT SWITCHING DIODE

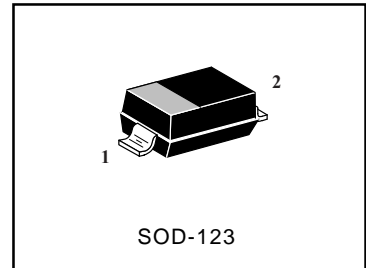
### FEATURE

- Fast Switching Speed
- High Conductance
- High Reverse Breakdown Voltage Rating
- 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.

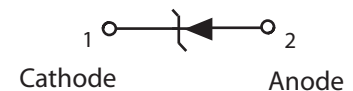
### Ordering Information(Pb-free)

Device	Marking	Shipping
LBAV3004T1G S-LBAV3004T1G	34W	3000/Tape&Reel
LBAV3004T3G S-LBAV3004T3G	34W	10000/Tape&Reel

**LBAV3004T1G**  
**S-LBAV3004T1G**



Equivalent Circuit Diagram



### Maximum Ratings @ T<sub>A</sub>=25°C unless otherwise specified

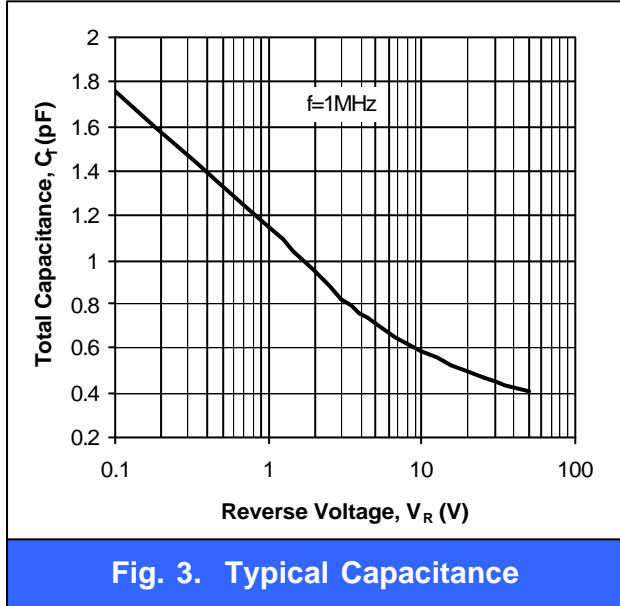
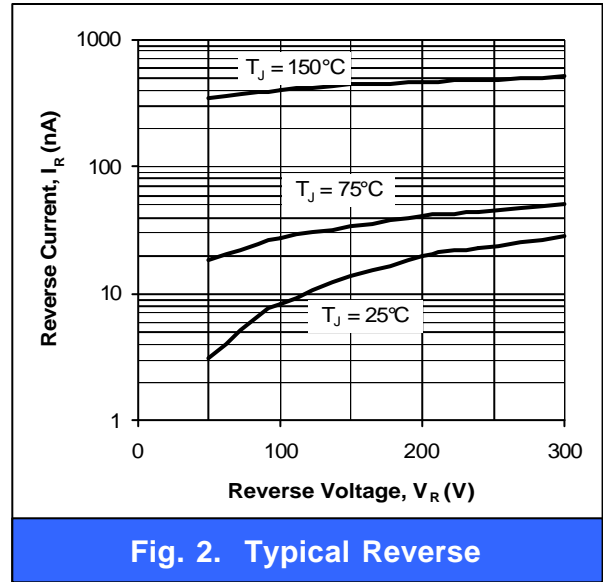
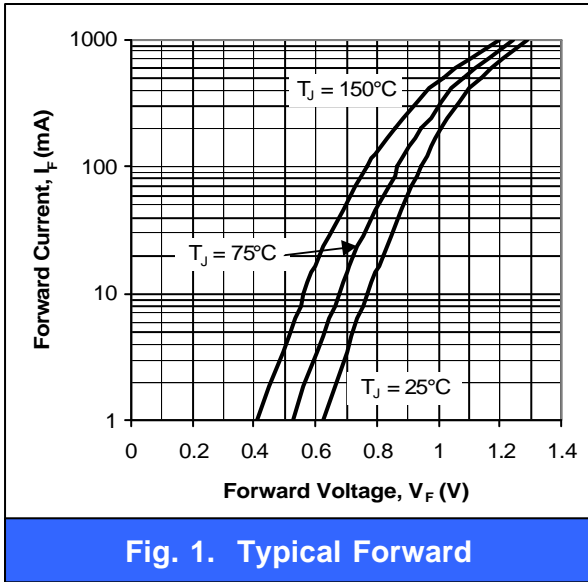
Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	350	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	240	V
Forward Continuous Current(Note 2)	I <sub>F</sub>	200	mA
Non-Repetitive Peak Forward Surge Current	I <sub>FSM</sub>	@t=1.0μs	4.0
		@t=1.0s	1.0
Power Dissipation(Note 2)	P <sub>d</sub>	410	mW
Thermal Resistance Junction to Ambient Air(Note 2)	R <sub>θJA</sub>	500	°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150	°C

### Electrical Characteristics @ T<sub>A</sub>=25°C unless otherwise specified, per element

Characteristic	Symbol	Min	Typ	MAX	Unit	Test Condition
Reverse Breakdown Voltage(Note 1)	V <sub>(BR)R</sub>	350			V	I <sub>R</sub> =150μA
Forward Voltage(Note 1)	V <sub>F</sub>		0.78	0.87	V	I <sub>F</sub> =20mA
			0.93	1.0		I <sub>F</sub> =100mA
			1.03	1.25		I <sub>F</sub> =200mA
Reverse Current(Note 1)	I <sub>R</sub>		30	100	nA	V <sub>R</sub> =240V
			35	100	μA	V <sub>R</sub> =240V, T <sub>j</sub> =150°C
Total Capacitance	C <sub>T</sub>		1.0	5.0	Pf	V <sub>R</sub> =0V, f=1.0MHZ
Reverse Recovery Time	T <sub>rr</sub>			50	ns	I <sub>F</sub> =I <sub>R</sub> =30mA I <sub>rr</sub> =3.0mA, R <sub>L</sub> =100Ω

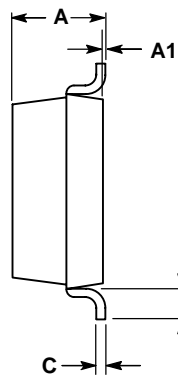
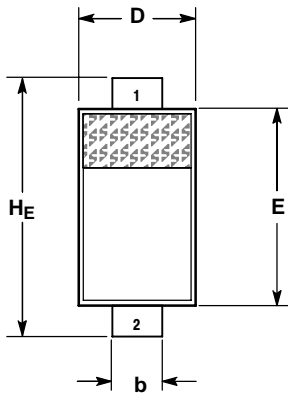
- Notes: 1. Short duration test pulse used to minimize self-heating effect.  
2. Part mounted on FR-4 board with recommended pad layout.

**LBAV3004T1G,S-LBAV3004T1G**



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**SOD-123**

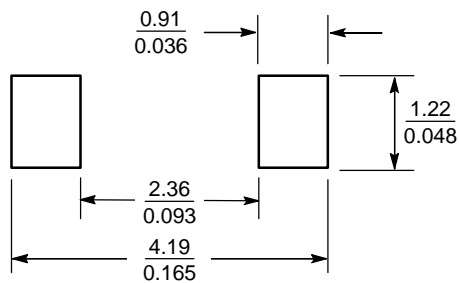


- NOTES:  
 1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.  
 2. CONTROLLING DIMENSION: INCH.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.94	1.17	1.35	0.037	0.046	0.053
A1	0.00	0.05	0.10	0.000	0.002	0.004
b	0.51	0.61	0.71	0.020	0.024	0.028
c	---	---	0.15	---	---	0.006
D	1.40	1.60	1.80	0.055	0.063	0.071
E	2.54	2.69	2.84	0.100	0.106	0.112
HE	3.56	3.68	3.86	0.140	0.145	0.152
L	0.25	---	---	0.010	---	---

STYLE 1:  
 PIN 1. CATHODE  
 2. ANODE

**SOLDERING FOOTPRINT\***



SCALE 10:1 (mm/inches)