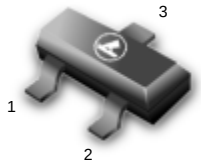
HIGH VOLTAGE SURFACE MOUNT SWITCHING DIODE

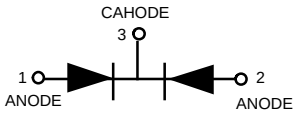
LMBD3004CLT1G
S-LMBD3004CLT1G

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.



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Ordering Information(Pb-free)

Device	Marking	Shipping
LMBD3004CLT1G S-LMBD3004CLT1G	KAC	3000/Tape&Reel
LMBD3004CLT3G S-LMBD3004CLT3G	KAC	10000/Tape&Reel

Maximum Ratings @ T_A=25℃ unless otherwise specified

Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	350	V
Working Peak Reverse Voltage DC Blocking Voltage	V_{RWM} V_R	300	V
RMS Reverse Voltage	$V_{R(RMS)}$	212	V
Forward Continuous Current(Note 2)	I_F	225	mA
Peak Repetitive Forward Current(Note 2)	I_{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current @t=1.0μs @t=1.0s	I_{FSM}	4.0 1.0	A
Power Dissipation(Note 2)	Pd	350	mW
Thermal Resistance Junction to Ambient Air(Note 2)	$R_{\theta JA}$	357	℃/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	℃

Electrical Characteristics @ T_A=25℃ unless otherwise specified, per element

Characteristic	Symbol	Min	Typ	MAX	Unit	Test Condition
Reverse Breakdown Voltage(Note 1)	$V_{(BR)R}$	350			V	I_R=100μA
Forward Voltage(Note 1)	V_F		0.78 0.93 1.03	0.87 1.0 1.25	V	I_F=20mA I_F=100mA I_F=200mA
Reverse Current(Note 1)	I_R		30 35	100 100	nA μA	V_R=240V V_R=240V, T_j=150℃
Total Capacitance	C_T		1.0	5.0	Pf	V_R=0V, f=1.0MHZ
Reverse Recovery Time	Trr			50	ns	I_F=I_R=30mA Irr=3.0mA, R_L=100Ω

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

LMBD3004CLT1G, S-LMBD3004CLT1G

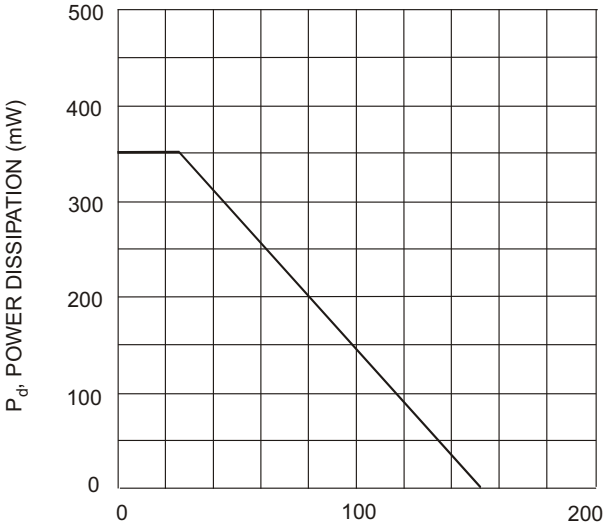


Fig. 1 Power Derating Curve, total package

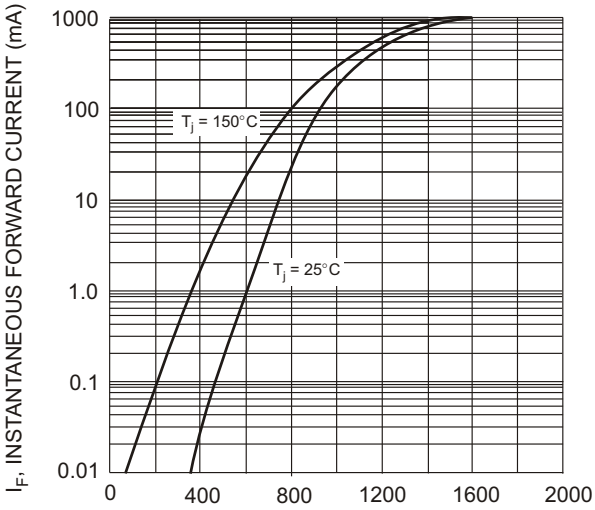


Fig. 2 Typical Forward Characteristics, per element

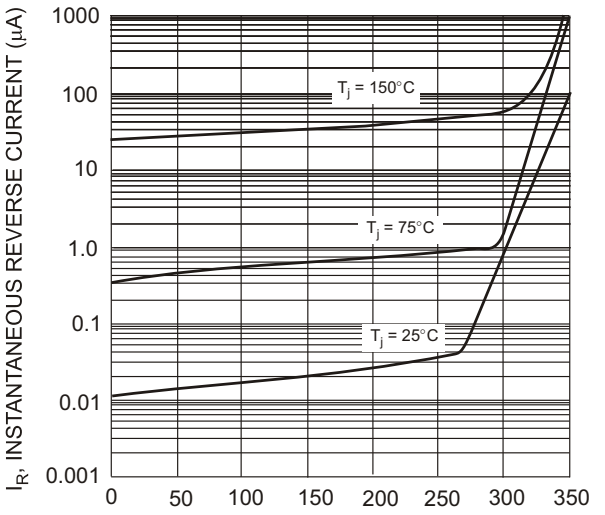


Fig. 3 Typical Reverse Characteristics, per element

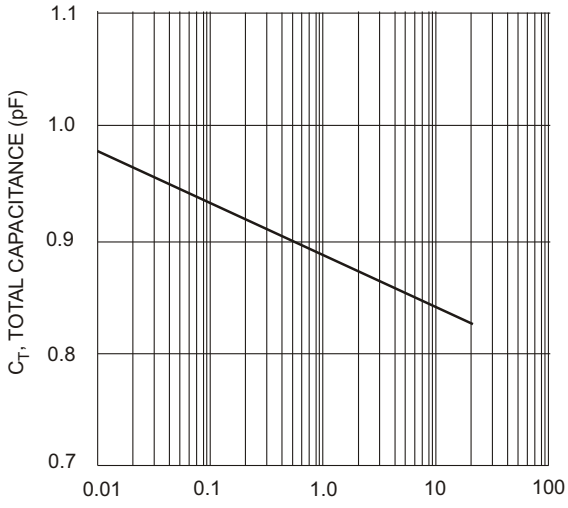
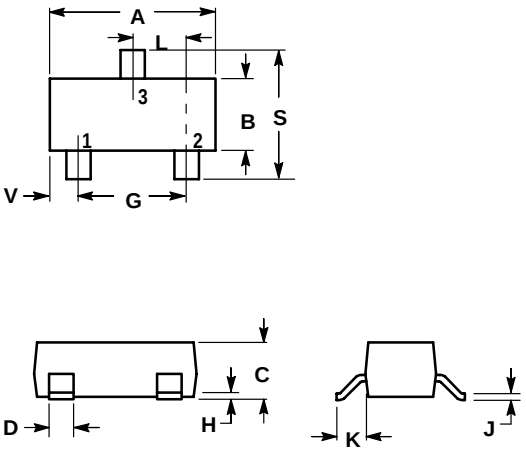


Fig. 4 Typical Total Capacitance vs. Reverse Voltage, per element

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NOTES:

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

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

PIN 1. BASE
2. EMITTER
3. COLLECTOR

