



Surface Mount Schottky Diode

●Applications

Low current rectification

●Features

- 1) Small surface mounting type.
- 2) Low I_R . ($I_R=70nA$ Typ.)
- 3) High reliability.
- 4) Pb-Free package is available.

●Construction

Silicon epitaxial planar

LRB500V-40T1



SOD-323



●Device Marking and Ordering Information

Device	Marking	Shipping
LRB500V-40T1	5	3000/Tape&Reel
LRB500V-40T1G	5 (Pb-Free)	3000/Tape&Reel

●Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	45	V
DC reverse voltage	V_R	40	V
Mean rectifying current	I_o	0.1	A
Peak forward surge current*	I_{FSM}	1	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40~+125	$^\circ\text{C}$

* 60Hz for 1ms

●Electrical characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	--	--	0.45	V	$I_F=10mA$
Reverse current	I_R	--	--	1	μA	$V_R=10V$
Capacitance between terminals	C_T	--	6.0	--	pF	$V_R=10V, f=1MHz$

Note) ESD sensitive product handling required.

LRB500V-40T1

● **Electrical characteristic curves** ($T_a = 25^\circ\text{C}$)

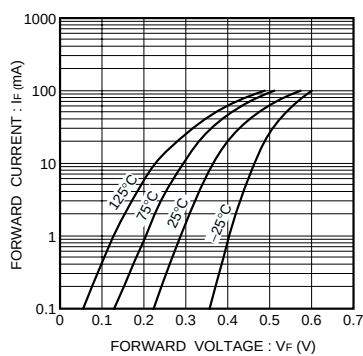


Fig. 1 Forward characteristics

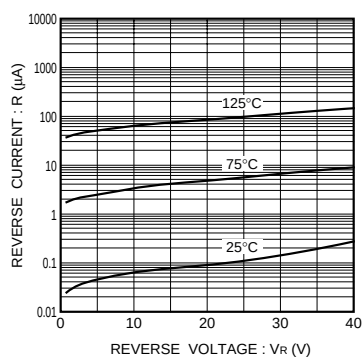


Fig. 2 Reverse characteristics

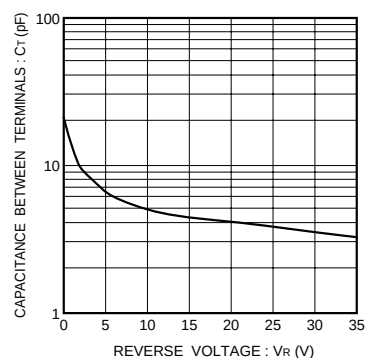


Fig. 3 Capacitance between terminals characteristics

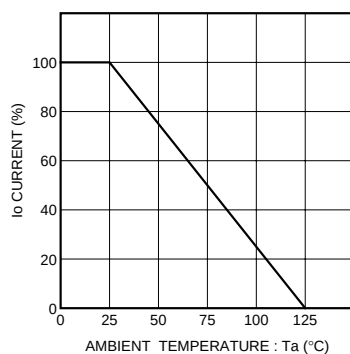
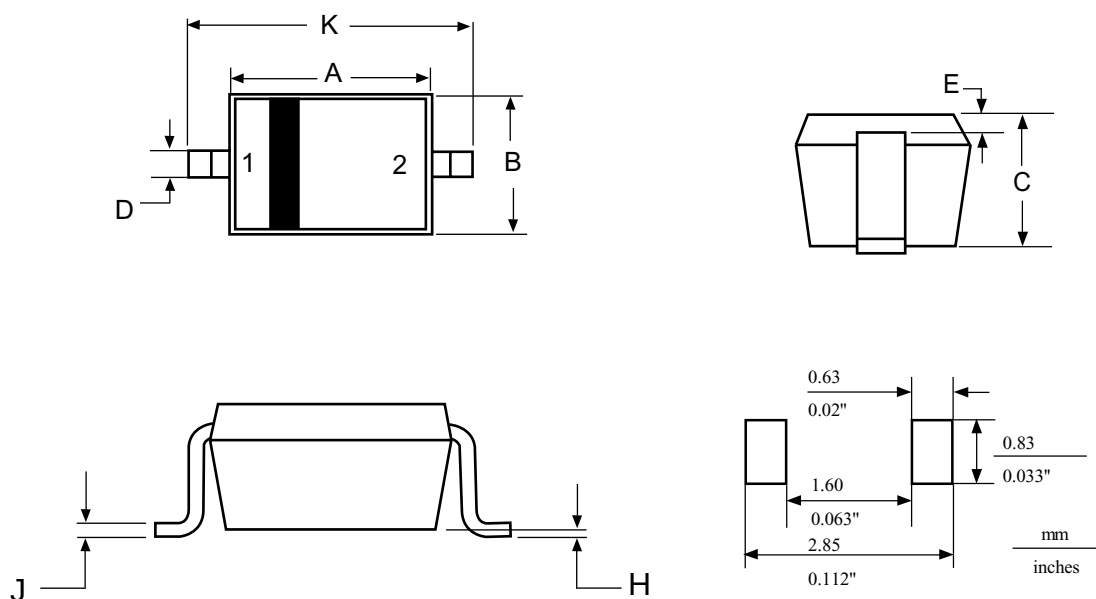


Fig. 4 Derating curve
(mounting on glass epoxy PCBs)

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NOTES:

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

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.80	0.063	0.071
B	1.15	1.35	0.045	0.053
C	0.80	1.00	0.031	0.039
D	0.25	0.40	0.010	0.016
E	0.15 REF		0.006 REF	
H	0.00	0.10	0.000	0.004
J	0.089	0.177	0.0035	0.0070
K	2.30	2.70	0.091	0.106

PIN: 1. CATHODE
2. ANODE