

Surface Mount Schottky Diode

- Applications
Low current rectification

- Features
 - 1) Small surface mounting type.
 - 2) High reliability.

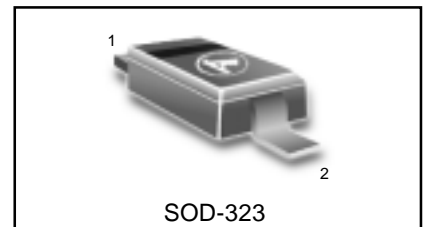
We declare that the material of product compliance with RoHS requirements.

- Construction
Silicon epitaxial planar

● Device marking and ordering information

Device	Marking	Shipping
LRB501V-40T1G	4	3000/Tape&Reel
LRB501V-40T3G	4	10000/Tape&Reel

LRB501V-40T1G



● Absolute maximum ratings (Ta = 25°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	°C
Storage temperature	T_{stg}	-40~+125	°C
Power Dissipation	P_D	200	mW

* 60 Hz for 1 μ s

● Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}	-	-	0.55	V	$I_F=100mA$
Forward voltage	V_{F2}	-	-	0.34	V	$I_F=10mA$
Reverse current	I_R	-	-	30	μA	$V_R=10V$
Capacitance between terminals	C_T	-	6.0	-	pF	$V_R=10V, f=1MHz$

Note) ESD sensitive product handling required.

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

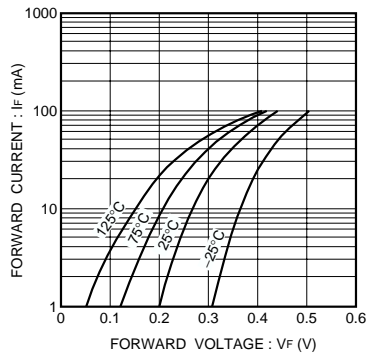


Fig. 1 Forward characteristics

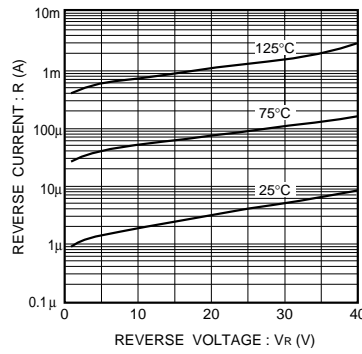


Fig. 2 Reverse characteristics

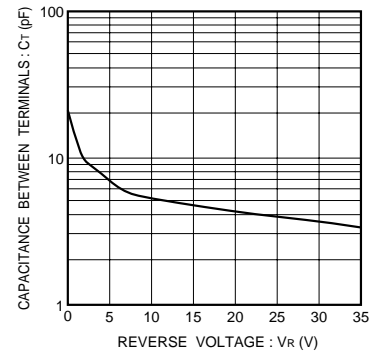


Fig. 3 Capacitance between terminals characteristics

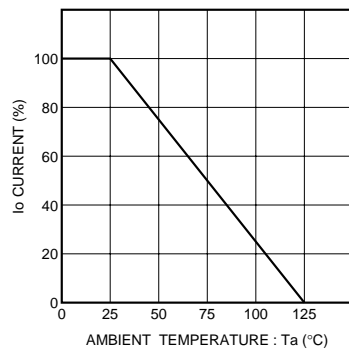
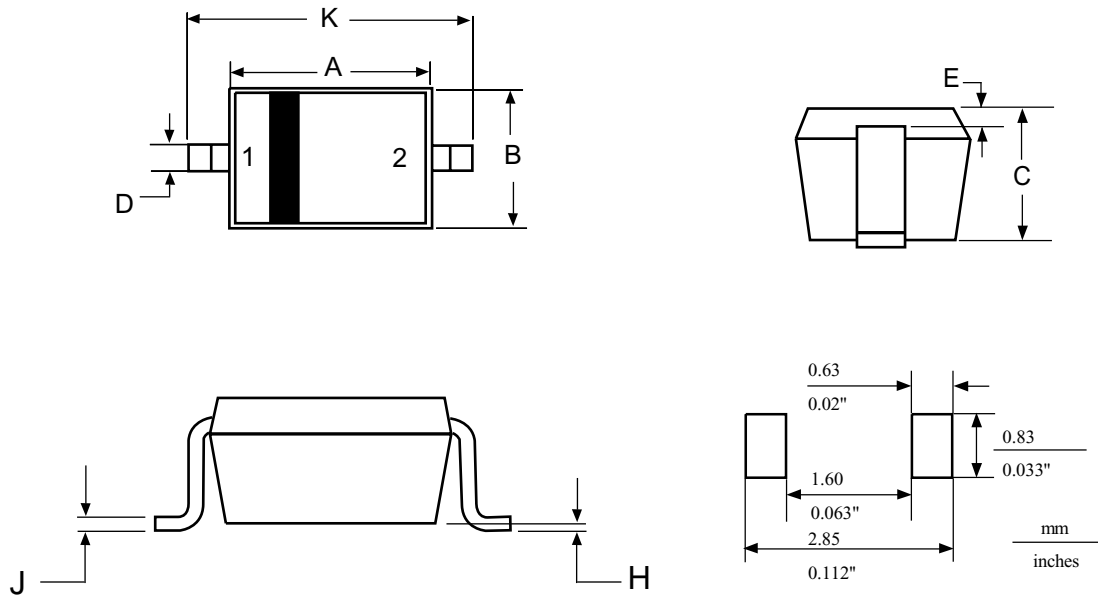


Fig. 4 Derating curve

LRB501V-40T1G

SOD-323



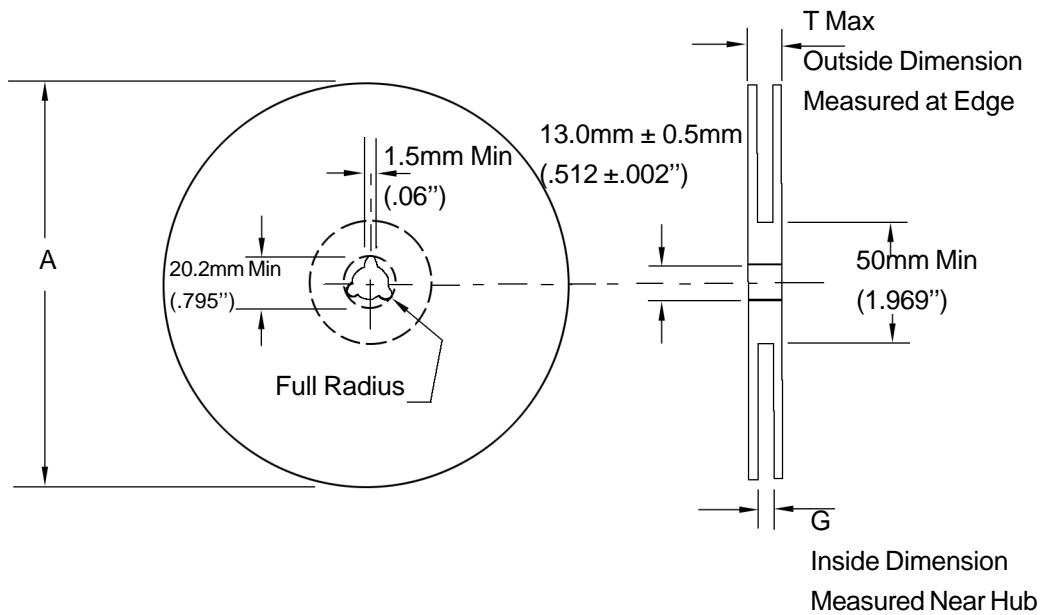
NOTES:

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

EMBOSSED TAPE AND REEL DATA FOR DISCRETES



Size	A Max	G	T Max
8 mm	330mm (12.992")	8.4mm+1.5mm, -0.0 (.33"+.059", -0.00)	14.4mm (.56")

Reel Dimensions

Metric Dimensions Govern — English are in parentheses for reference only

Storage Conditions

Temperature: 5 to 40 Deg.C (20 to 30 Deg. C is preferred)

Humidity: 30 to 80 RH (40 to 60 is preferred)

Recommended Period: One year after manufacturing

(This recommended period is for the soldering condition only. The characteristics and reliabilities of the products are not restricted to this limitation)

Shipment Specification

