

# LRB500V-40T1G

# S-LRB500V-40T1G

Surface Mount Schottky Diode

## 1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- Low IR.
- High reliability.
- Small surface mounting type.

## 2. APPLICATIONS

- Low current rectification
- Silicon epitaxial planar

## 3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LRB500V-40T1G	5	3000/Tape&Reel
LRB500V-40T3G	5	13000/Tape&Reel

## 4. MAXIMUM RATINGS(Ta = 25°C)

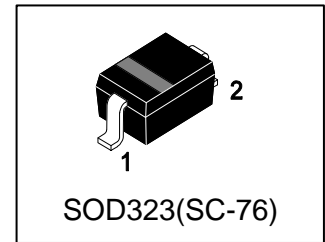
Parameter	Symbol	Limits	Unit
Peak Reverse Voltage	VRM	45	V
DC Reverse Voltage	VR	40	V
Mean rectifying current	IO	0.1	A
Peak Forward Surge Current(Note 1)	IFSM	1	A
Junction Temperture	Tj	125	°C
Storage Temperture	Tstg	-40~+125	°C

1.60Hz for 1<sup>∞</sup>

## 5. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-4 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	200 2	mW mW/°C
Thermal Resistance, Junction-to-Ambient	RθJA	500	°C/W

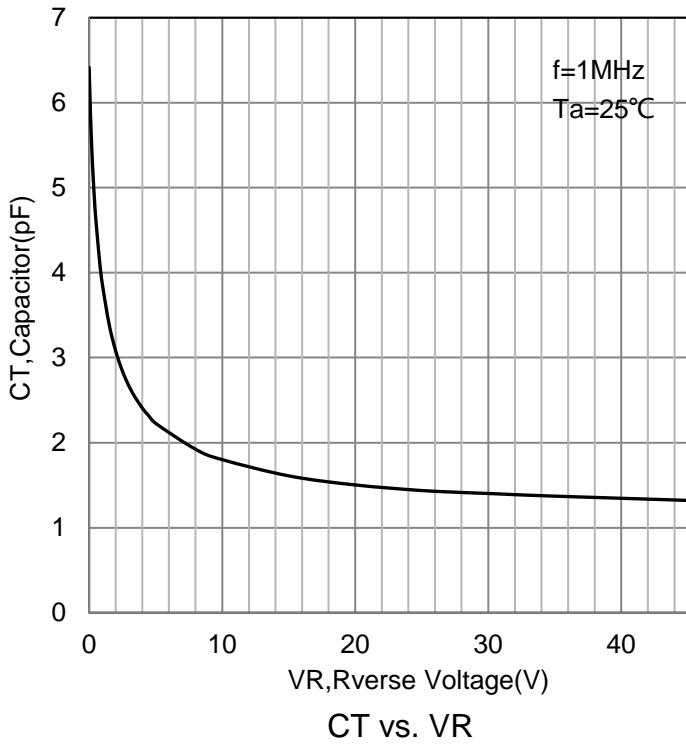
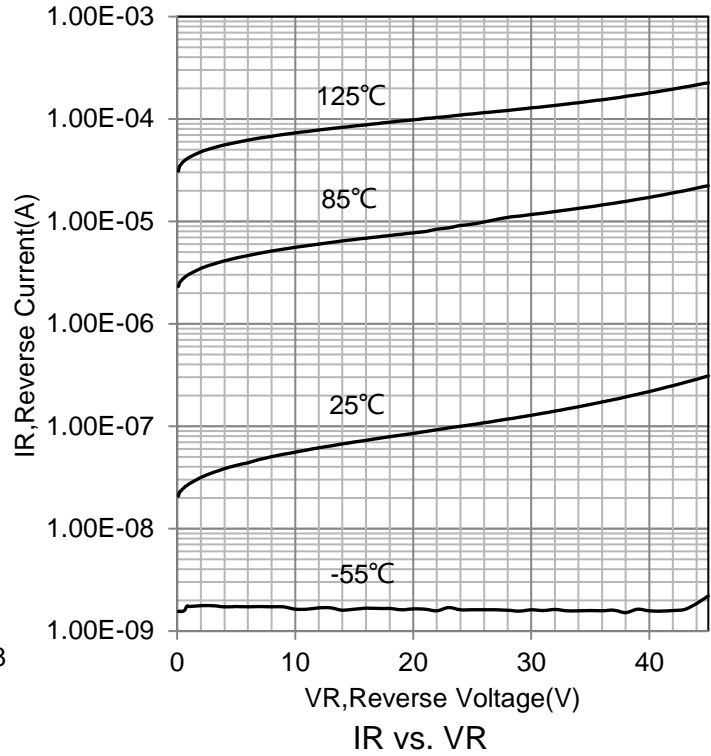
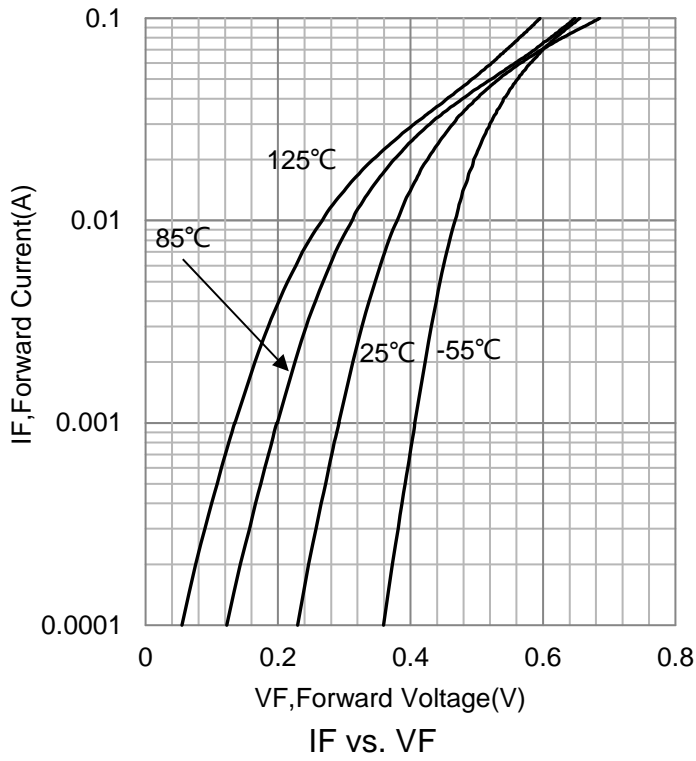
1.PCB Size:30.0mm×25.0mm×1.6mm,FR-4 Board;



**6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)**

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Forward voltage (IF=10mA)	VF	-	-	0.45	V
Reverse Current (VR=10V)	IR	-	-	1	μA
Capacitance between terminals (VR =10V, f=1MHz )	CT	-	1.8	-	pF

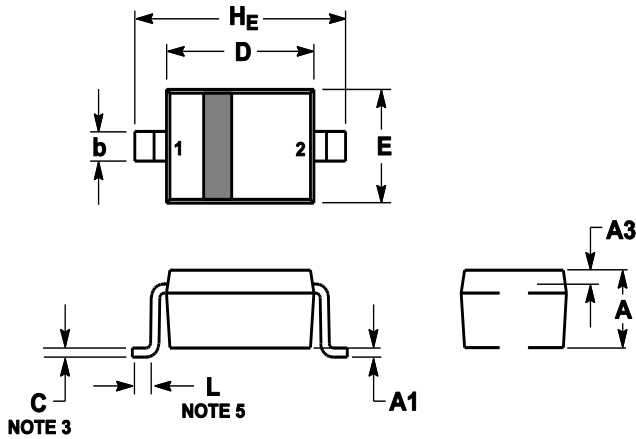
**7.ELECTRICAL CHARACTERISTICS CURVES**



### 8. OUTLINE AND DIMENSIONS

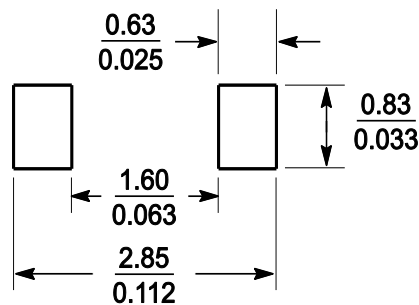
Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.8	0.9	1	0.031	0.035	0.04
A1	0	0.05	0.1	0	0.002	0.004
A3	0.15REF			0.006REF		
b	0.25	0.32	0.4	0.01	0.012	0.016
C	0.089	0.12	0.177	0.003	0.005	0.007
D	1.6	1.7	1.8	0.062	0.066	0.07
E	1.15	1.25	1.35	0.045	0.049	0.053
L	0.08			0.003		
HE	2.3	2.5	2.7	0.09	0.098	0.105

### 9. SOLDERING FOOTPRINT



## **DISCLAIMER**

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
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