

# SCHOTTKY BARRIER DIODE

## Features

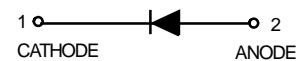
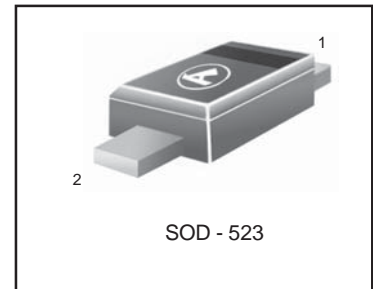
- (1) Small surface mounting type SC-79/SOD523
- (2) Low reverse current and low forward voltage.
- (3) High reliability
- (4) S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

## Construction

silicon epitaxial planar

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

**LRB751S-40T1G**  
**S-LRB751S-40T1G**



## MAXIMUM RATINGS (T<sub>A</sub> = 25°C)

| Parameter                  | Symbol           | Limits   | Unit |
|----------------------------|------------------|----------|------|
| Peak reverse voltage       | V <sub>RM</sub>  | 40       | V    |
| DC reverse voltage         | V <sub>R</sub>   | 30       | V    |
| Mean rectifying current    | I <sub>O</sub>   | 30       | mA   |
| Peak forward surge current | I <sub>FSM</sub> | 200      | mA   |
| Junction temperature       | T <sub>j</sub>   | 125      | °C   |
| Storage temperature        | T <sub>stg</sub> | -40~+125 | °C   |

## DEVICE MARKING

LRB751S-40T1G= 5

## ELECTRICAL CHARACTERISTICS(T<sub>A</sub>=25°C)

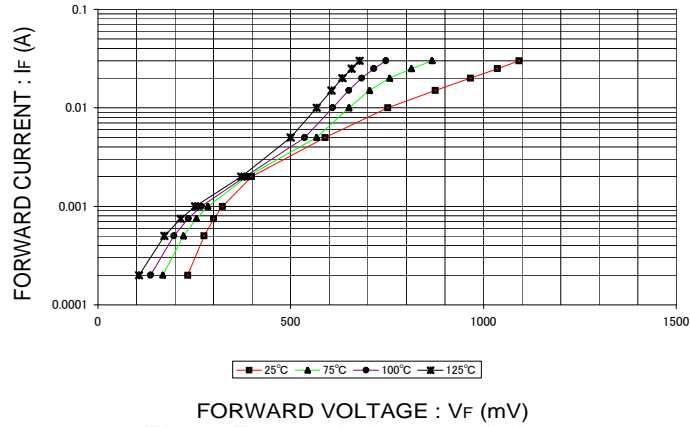
| Parameter                     | Symbol         | Min. | Typ | Max. | Unit | Conditions                 |
|-------------------------------|----------------|------|-----|------|------|----------------------------|
| Forward voltage               | V <sub>F</sub> | -    | -   | 0.37 | V    | I <sub>F</sub> =1mA        |
| Reverse current               | I <sub>R</sub> | -    | -   | 0.5  | μA   | V <sub>R</sub> =30V        |
| Capacitance between terminals | C <sub>T</sub> | -    | 2.0 | -    | pF   | V <sub>R</sub> =1V, f=1MHz |

## Ordering Information

| Device                           | Marking | Shipping        |
|----------------------------------|---------|-----------------|
| LRB751S-40T1G<br>S-LRB751S-40T1G | 5       | 3000/Tape&Reel  |
| LRB751S-40T3G<br>S-LRB751S-40T3G | 5       | 10000/Tape&Reel |

LRB751S-40T1G , S-LRB751S-40T1G

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



FORWARD VOLTAGE :  $V_F$  (mV)  
Fig. 1 Forward characteristics

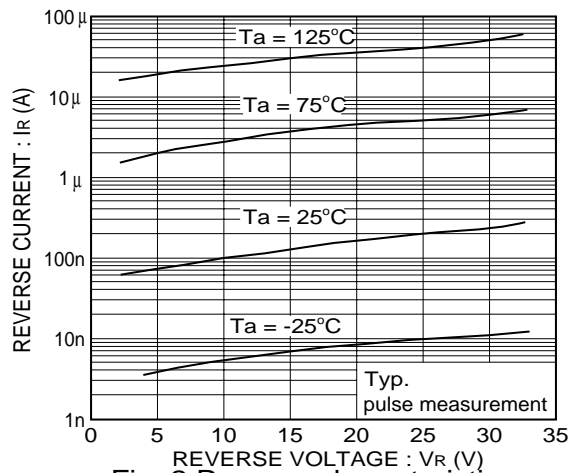


Fig. 2 Reverse characteristics

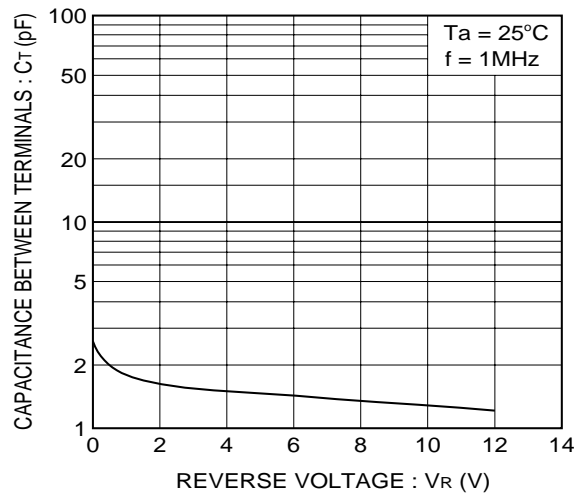
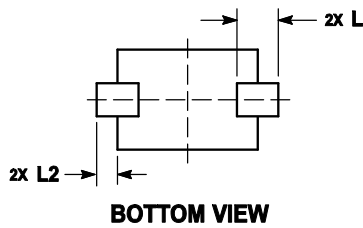
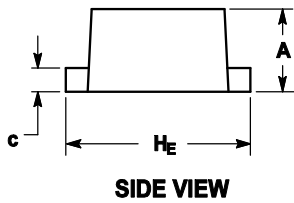
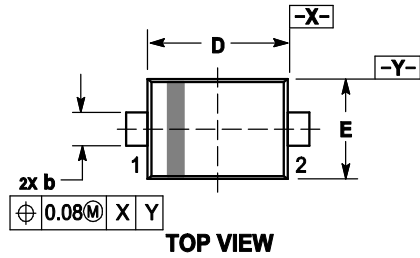


Fig. 3 Capacitance between terminals characteristics

**LRB751S-40T1G , S-LRB751S-40T1G**

**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              | 0.50        | 0.60 | 0.70 | 0.020     | 0.024 | 0.028 |
| b              | 0.25        | 0.30 | 0.35 | 0.010     | 0.012 | 0.014 |
| c              | 0.07        | 0.14 | 0.20 | 0.003     | 0.006 | 0.008 |
| D              | 1.10        | 1.20 | 1.30 | 0.043     | 0.047 | 0.051 |
| E              | 0.70        | 0.80 | 0.90 | 0.028     | 0.031 | 0.035 |
| H <sub>E</sub> | 1.50        | 1.60 | 1.70 | 0.059     | 0.063 | 0.067 |
| L              | 0.30 REF    |      |      | 0.012 REF |       |       |
| L <sub>2</sub> | 0.15        | 0.20 | 0.25 | 0.006     | 0.008 | 0.010 |

**SOLDERING FOOTPRINT**

