

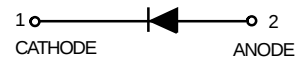
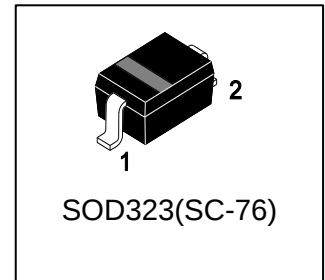
# LBAT40HT1G

## S-LBAT40HT1G

### SCHOTTKY BARRIER DIODE

#### 1. FEATURES

- Small surface mounting type.
- Ultralow VF (VF =0.5V Typ. at 0.2A)
- High reliability.
- 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.



#### 2. DEVICE MARKING AND ORDERING INFORMATION

| Device       | Marking | Shipping        |
|--------------|---------|-----------------|
| LBAT40HT1G   | 6S      | 3000/Tape&Reel  |
| S-LBAT40HT1G | 6S      | 3000/Tape&Reel  |
| LBAT40HT3G   | 6S      | 10000/Tape&Reel |
| S-LBAT40HT3G | 6S      | 10000/Tape&Reel |

#### 3. MAXIMUM RATINGS

| Parameter                  | Symbol     | Limits | Unit |
|----------------------------|------------|--------|------|
| Continuous Reverse Voltage | VR         | 40     | V    |
| Peak Forward Current       | IF         | 350    | mA   |
| Peak Forward Surge Current | IFM(surge) | 1500   | mA   |

#### 4. THERMAL CHARACTERISTICS(TJ =125°C unless otherwise noted )

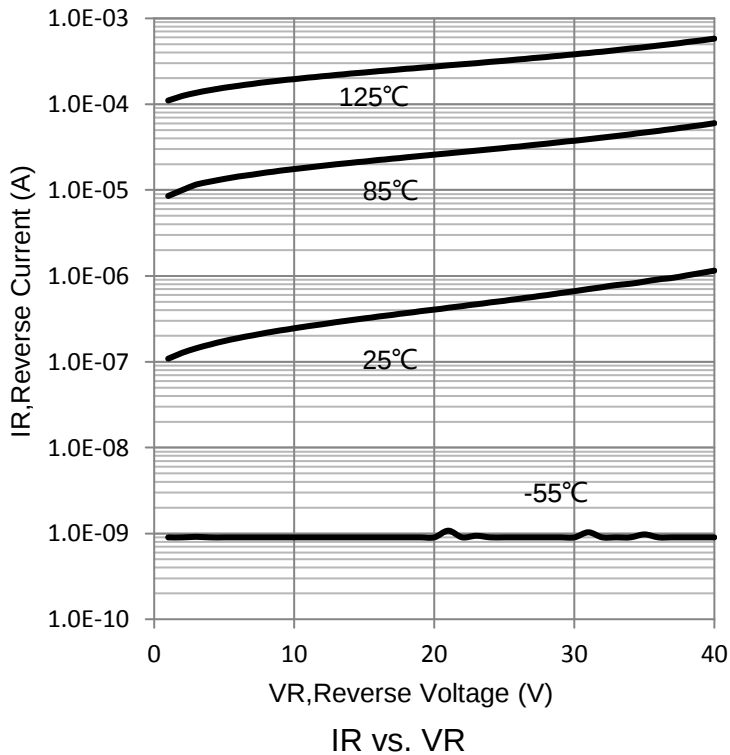
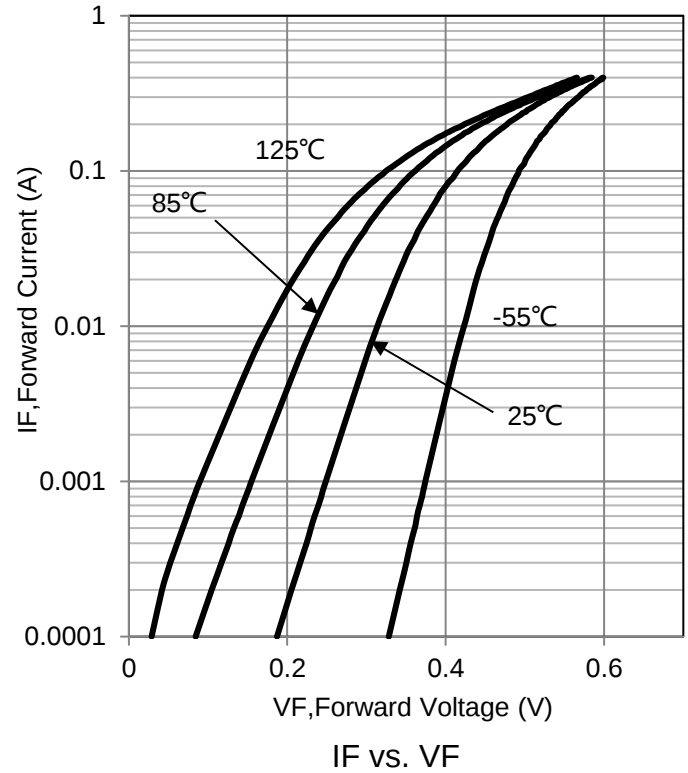
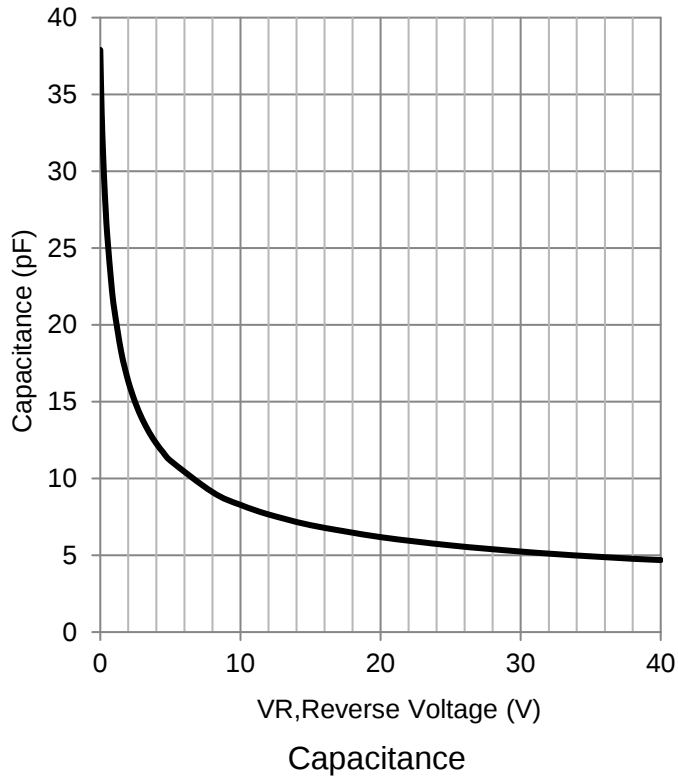
| Parameter                                                                         | Symbol | Limits      | Unit        |
|-----------------------------------------------------------------------------------|--------|-------------|-------------|
| Total Device Dissipation,<br>FR-5 Board (Note 1) @ TA = 25°C<br>Derate above 25°C | PD     | 200<br>2    | mW<br>mW/°C |
| Thermal Resistance,<br>Junction-to-Ambient                                        | RθJA   | 500         | °C/W        |
| Junction Temperature                                                              | Tj     | 125         | °C          |
| Storage Temperature Range                                                         | Tstg   | -65 to +125 | °C          |

1. FR-5 = 1.0 x 0.75 x 0.062 in.

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

| Characteristic                                 | Symbol | Min. | Typ. | Max. | Unit |
|------------------------------------------------|--------|------|------|------|------|
| Reverse Voltage Leakage Current<br>(VR = 25 V) | IR     | -    | -    | 1    | μA   |
| Reverse Breakdown Voltage<br>(IBR = 10 μA)     | V(BR)  | 40   | -    | -    | V    |
| Forward Voltage<br>(IF = 20 mA)                | VF     | -    | -    | 370  | mV   |
| (IF = 200 mA)                                  |        | -    | -    | 600  |      |

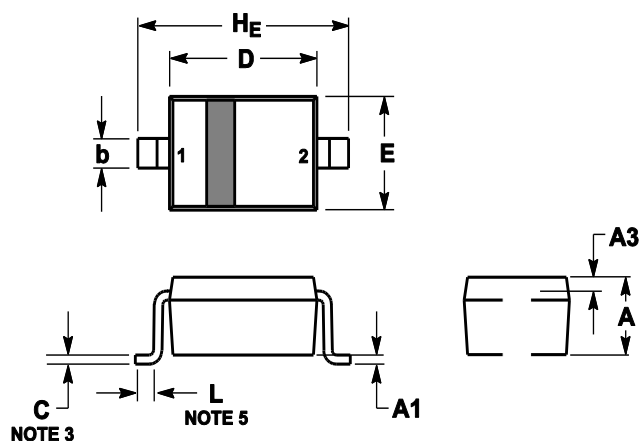
## 6.ELECTRICAL CHARACTERISTICS CURVES



## 7.OUTLINE AND DIMENSIONS

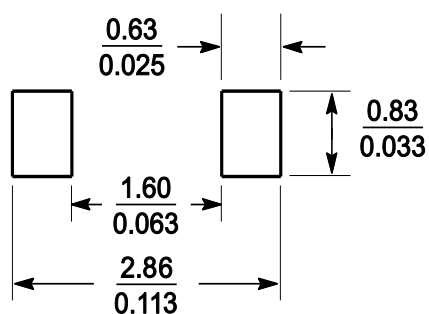
Notes:

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 |

## 8.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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