

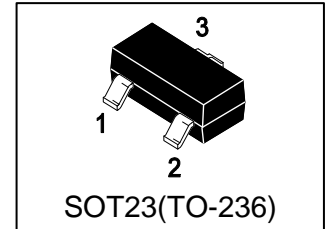
LBAS40-06LT1G

S-LBAS40-06LT1G

Schottky barrier diode

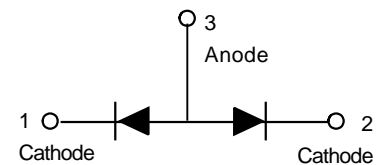
1. FEATURES

- Low forward current
- Guard ring protected
- Low diode capacitance.
- 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. APPLICATIONS

- Ultra high-speed switching.
- Voltage clamping.
- Protection circuits.
- Blocking diodes.



3. DEVICE MARKING AND RESISTOR VALUES

| Device | Marking | Shipping |
|---------------|---------|-----------------|
| LBAS40-06LT1G | L2 | 3000/Tape&Reel |
| LBAS40-06LT3G | L2 | 10000/Tape&Reel |

4. MAXIMUM RATINGS(Ta = 25°C)

| Parameter | Symbol | Limits | Unit |
|--|--------|----------|------|
| Continuous reverse voltage | VR | 40 | V |
| Continuous forward current | IF | 120 | mA |
| Repetitive Peak forward surge current(tp <1s, δ<0.5) | IFSM | 120 | mA |
| Non-repetitive peak forward current (tp <10ms) | IFSM | 200 | mA |
| Storage temperature | Tstg | -65~+150 | °C |
| Junction temperature | Tj | 150 | °C |
| Operating ambient temperature | Tamb | -65~+150 | °C |

5. THERMAL CHARACTERISTICS

| Parameter | Symbol | Limits | Unit |
|--|--------|--------|------|
| Total Power Dissipation | PD | 225 | mW |
| Thermal resistance from junction to ambient (Note 1) | RθJA | 500 | °C/W |
| Thermal resistance from junction to Case (Note 1) | RθJC | 300 | °C/W |

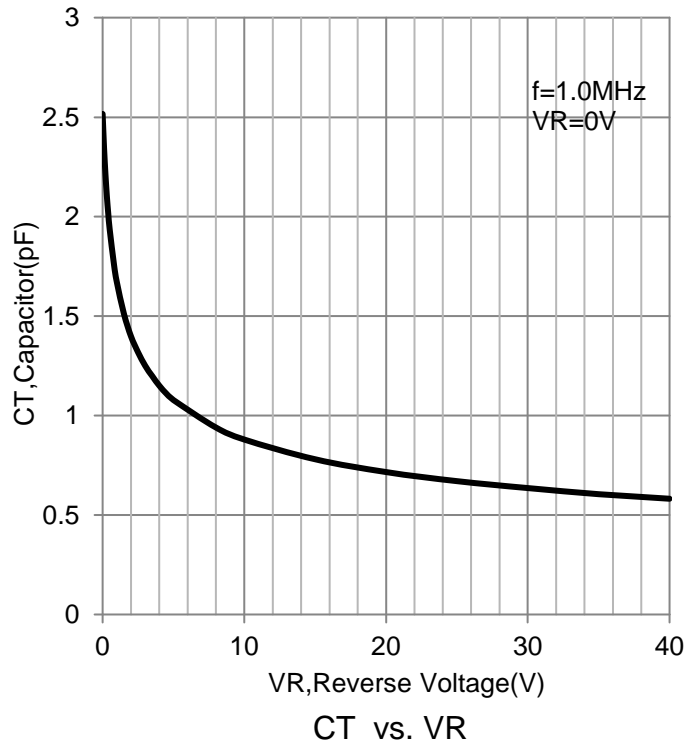
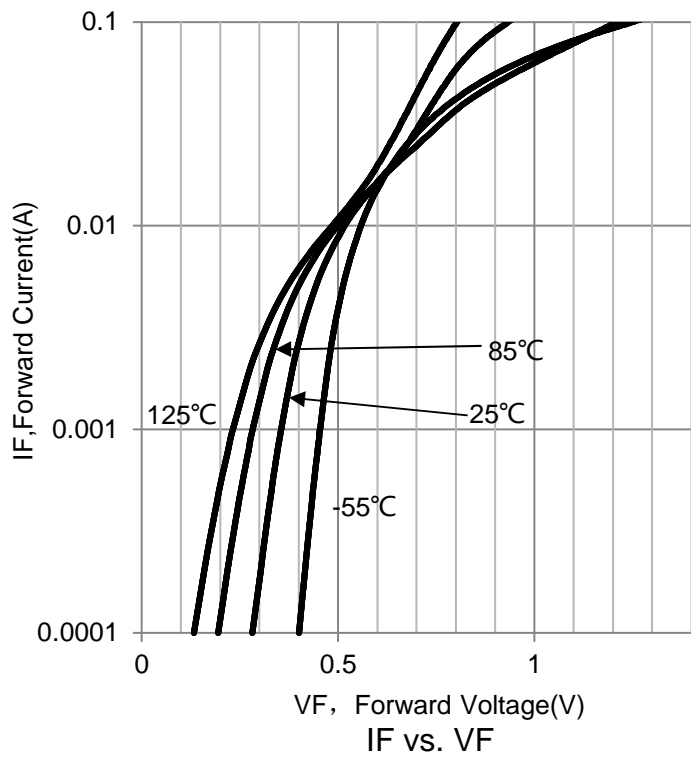
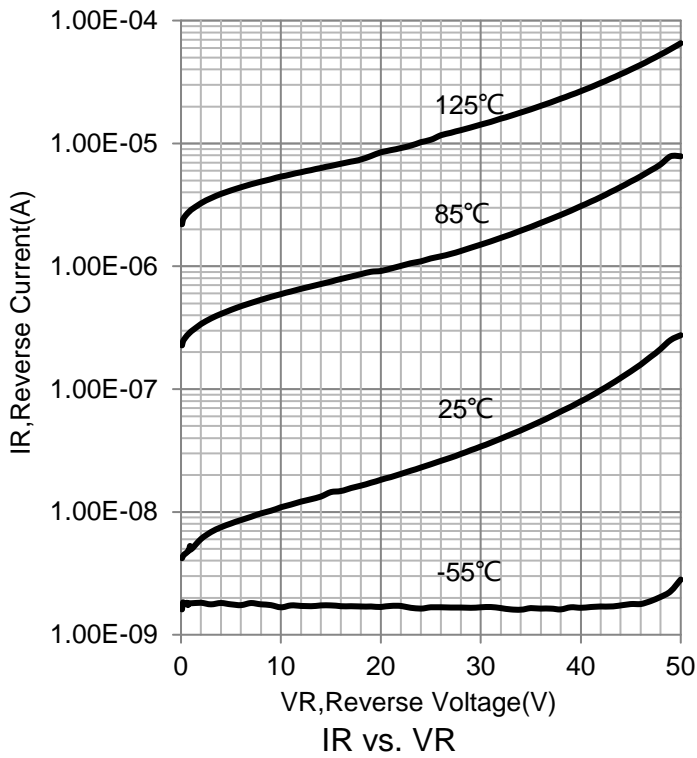
1. 30.0mm x25.0mm x1.6mm(FR4), Thickness of copper film:35um.

6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

| CHARACTERISTICS | Symbol | Limits | Unit |
|-------------------------------------|--------|--------|------|
| Forward voltage (IF =1mA) | VF | 400 | mV |
| (IF =10mA) | | 560 | mV |
| (IF =40mA) | | 1 | V |
| Reverse current(Note 2) (VR=30V) | IR | 1 | μA |
| (VR=40V) | | 10 | μA |
| Diode capacitance (f=1MHz,VR =0) | Cd | 5 | pF |

2.Pulse test:tp =300μs,δ=0.02.

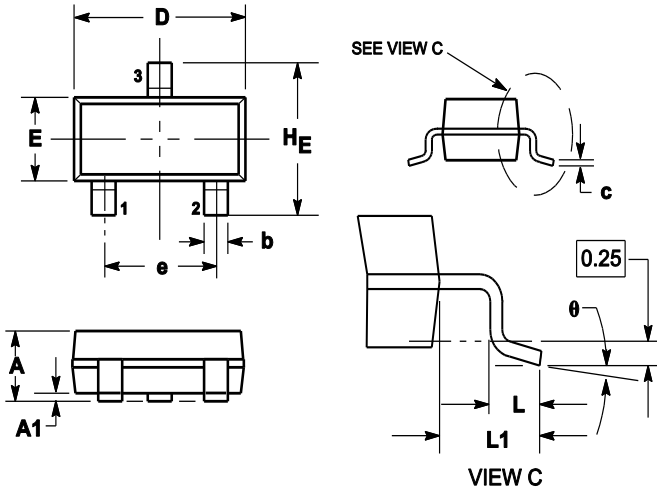
7. ELECTRICAL CHARACTERISTICS CURVES



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 | 0.89 | 1 | 1.11 | 0.035 | 0.04 | 0.044 |
| A1 | 0.01 | 0.06 | 0.1 | 0.001 | 0.002 | 0.004 |
| b | 0.37 | 0.44 | 0.5 | 0.015 | 0.018 | 0.02 |
| c | 0.09 | 0.13 | 0.18 | 0.003 | 0.005 | 0.007 |
| D | 2.80 | 2.9 | 3.04 | 0.11 | 0.114 | 0.12 |
| E | 1.20 | 1.3 | 1.4 | 0.047 | 0.051 | 0.055 |
| e | 1.78 | 1.9 | 2.04 | 0.07 | 0.075 | 0.081 |
| L | 0.10 | 0.2 | 0.3 | 0.004 | 0.008 | 0.012 |
| L1 | 0.35 | 0.54 | 0.69 | 0.014 | 0.021 | 0.029 |
| HE | 2.10 | 2.4 | 2.64 | 0.083 | 0.094 | 0.104 |
| θ | 0° | --- | 10° | 0° | --- | 10° |

9.SOLDERING FOOTPRINT

