

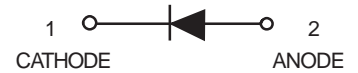
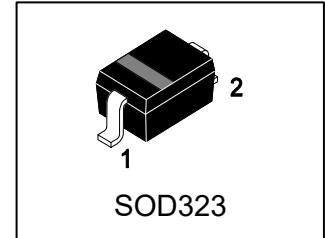
# RB500V-40

# S-RB500V-40

## 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       |
|-----------|---------|----------------|
| RB500V-40 | 5       | 3000/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   |

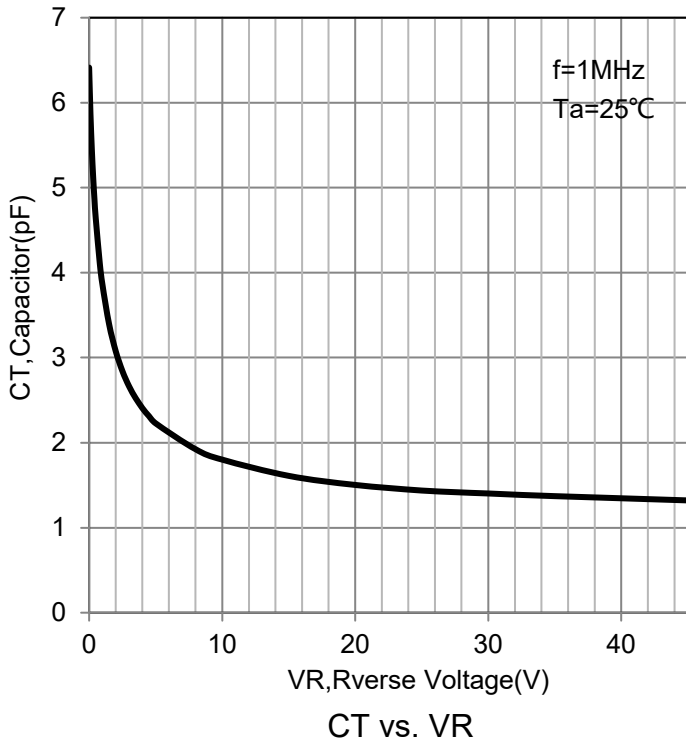
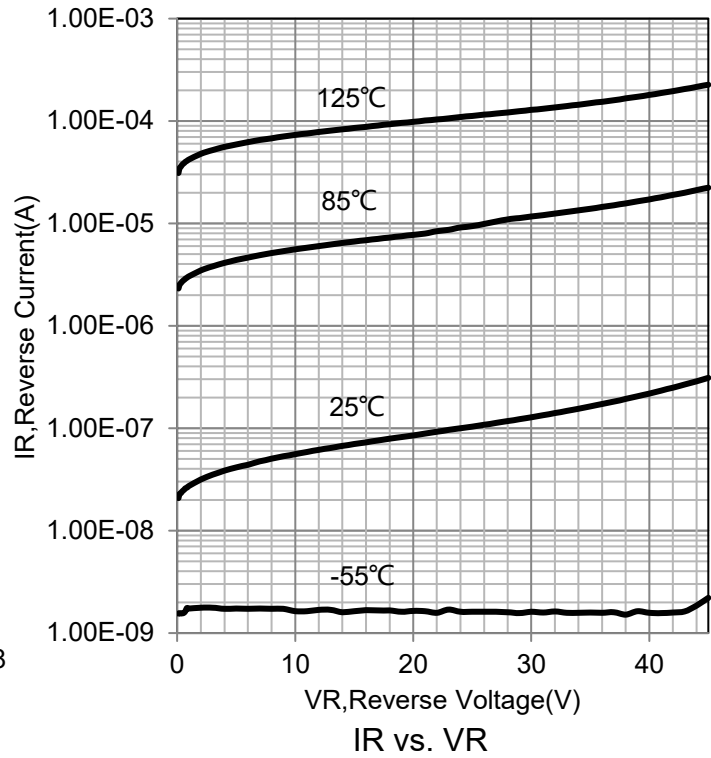
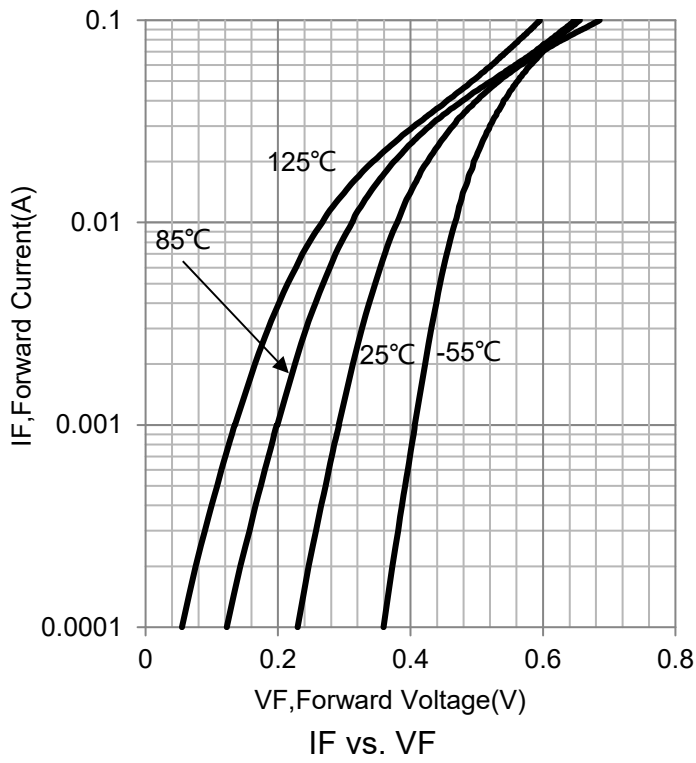
1.60Hz for 1<sup>∞</sup>

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

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



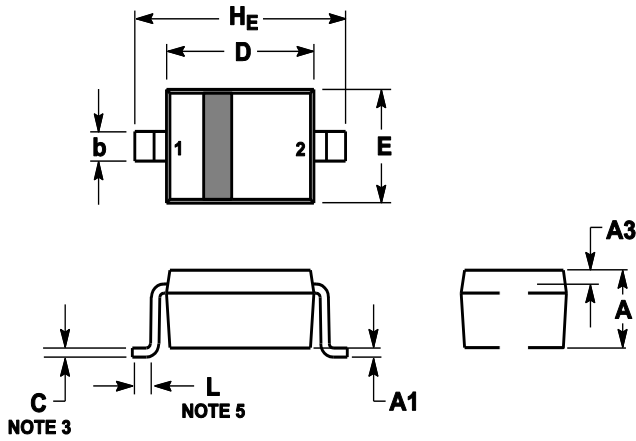
**6.ELECTRICAL CHARACTERISTICS CURVES**



**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**
