

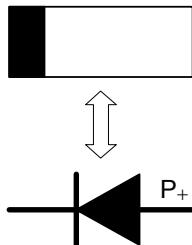
SMD Schottky Barrier Diode

■ Features

$I_O = 200\text{mA}$

$V_R = 40\text{V}$

- Designed for mounting on small surface.
- Extremely thin package.
- Low leakage current ($I_R=0.1\mu\text{A}$ typ. @ $V_R=10\text{V}$).
- Majority carrier conduction.
- Lead-free device

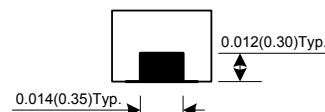
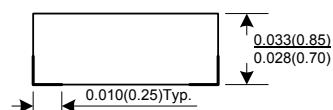


■ Mechanical Data

- Case :0603(1608) 1005(2512) standard package, molded plastic.
- Terminals : Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity : Indicated by cathode band.
- Mounting position : Any.
- Weight : BD:0.003gram (approximately)
BF:0.006gram (approximately)

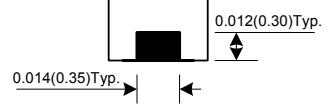
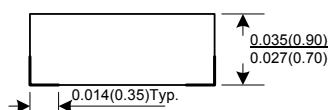
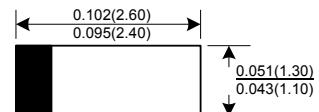
■ General Description

0603(1608)



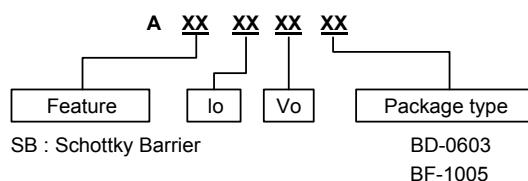
Dimensions in inches and (millimeter)

1005(2512)



Dimensions in inches and (millimeter)

■ Ordering information





ASB0240

SMD Schottky Barrier Diode

■ Maximum Rating (at $T_A=25^\circ\text{C}$ unless otherwise noted)

| Symbol | Parameter | | Conditions | Min | Typ | Max | Unit |
|-----------|---------------------------------|------|----------------------------------------------------------------------------|-----|------|------|------------------|
| V_{RRM} | Repetitive peak reverse voltage | | | - | - | 45 | V |
| V_R | Reverse voltage | | | - | - | 40 | V |
| I_O | Average forward current | | | - | - | 200 | mA |
| I_{FSM} | Forward current, surge peak | 0603 | 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | - | 2000 | - | mA |
| | | 1005 | | - | 3000 | - | |
| P_D | Power Dissipation | 0603 | | - | - | 150 | mW |
| | | 1005 | | - | - | 250 | |
| T_{STG} | Storage temperature | | | -40 | - | +125 | $^\circ\text{C}$ |
| T_j | Junction temperature | | | -40 | - | +125 | $^\circ\text{C}$ |

■ Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

| Symbol | Parameter | | Conditions | Min. | Typ. | Max. | Unit |
|--------|----------------------------------|--|-------------------------------------------------|------|------|------|---------------|
| V_F | Forward voltage | | $I_F=200\text{mADC}$ | - | 0.45 | 0.55 | V |
| I_R | Reverse current | | $V_R=10\text{V}$ | - | - | 1 | μA |
| C_T | Capacitance between terminals | | $F=1\text{MHz}$, and 10 VDC reverse voltage | - | 9 | - | pF |

■ Rating And Characteristic Curves

Fig. 1 - Forward characteristics

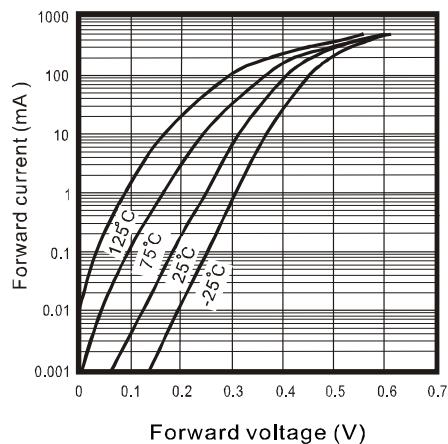


Fig. 2 - Reverse characteristics

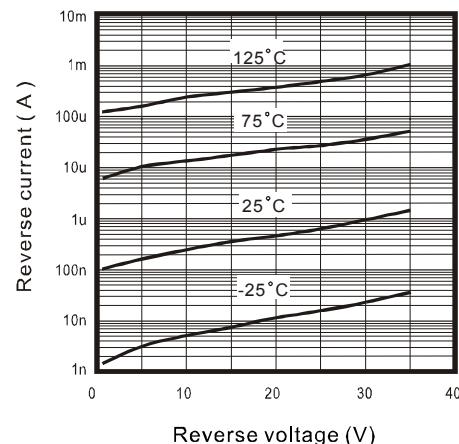


Fig. 3 - Capacitance between terminals characteristics

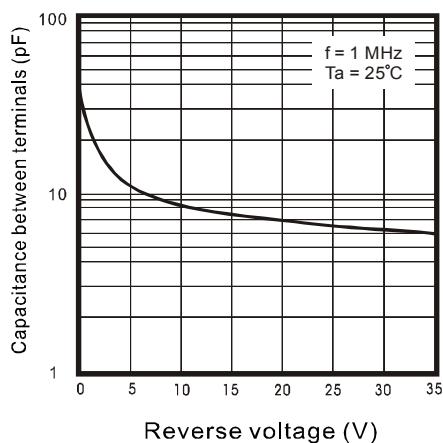
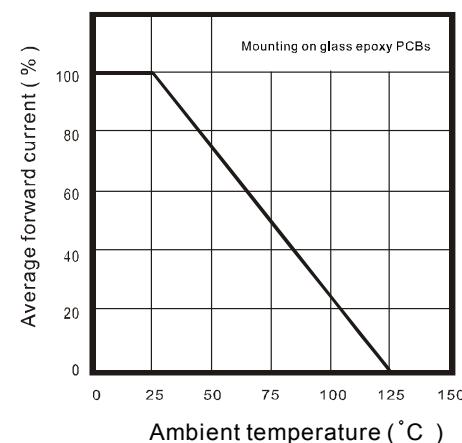


Fig. 4 - Current derating curve



■ Marking Information

