



DB3X209K0L  
Silicon epitaxial planar type

For high frequency rectification

- Features
- Low forward voltage VF
  - Short reverse recovery time trr
  - Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

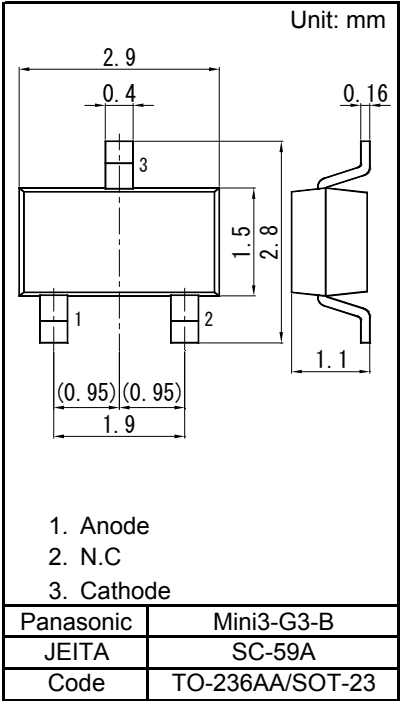
■ Marking Symbol: 4S

■ Packaging  
Embossed type (Thermo-compression sealing) : 3 000 pcs / reel (standard)

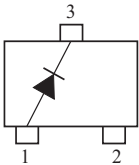
■ Absolute Maximum Ratings Ta = 25 °C

| Parameter                                    | Symbol | Rating      | Unit |
|----------------------------------------------|--------|-------------|------|
| Reverse voltage                              | VR     | 20          | V    |
| Repctitive peak reverse voltage              | VRRM   | 20          | V    |
| Forward current (Average)                    | IF(AV) | 500         | mA   |
| Non-repetitive peak forward surge current *1 | IFSM   | 3           | A    |
| Junction temperature                         | Tj     | 125         | °C   |
| Operating ambient temperature                | Topr   | -40 to +85  | °C   |
| Storage temperature                          | Tstg   | -55 to +125 | °C   |

Note: \*1 50 Hz sine wave 1 cycle (Non-repetitive peak current)



Internal Connection

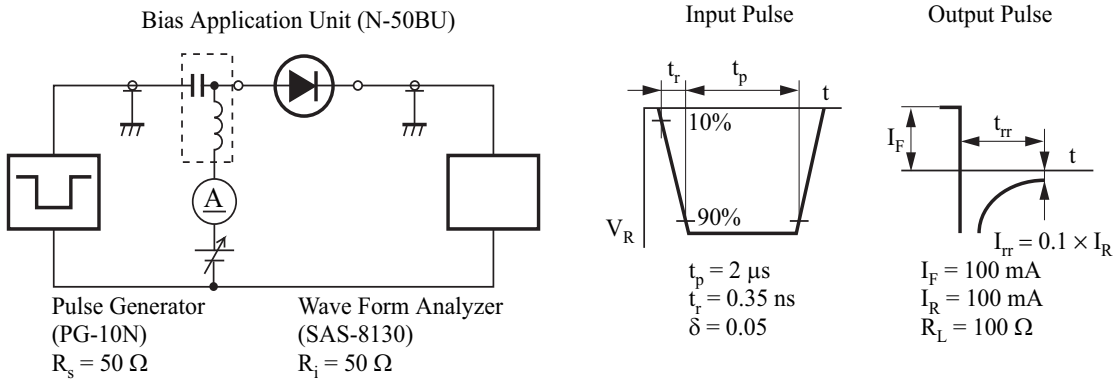




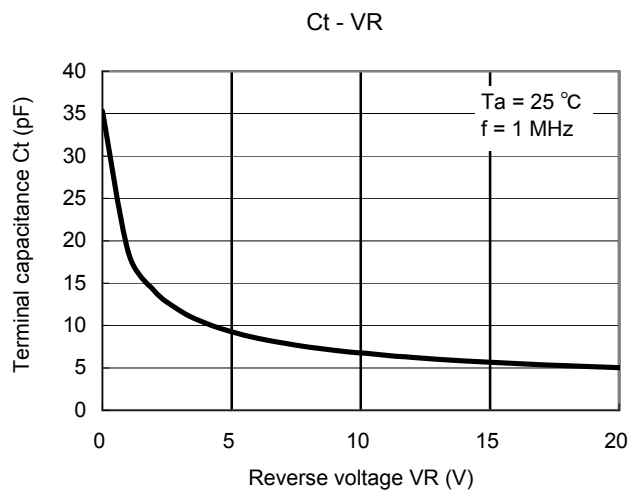
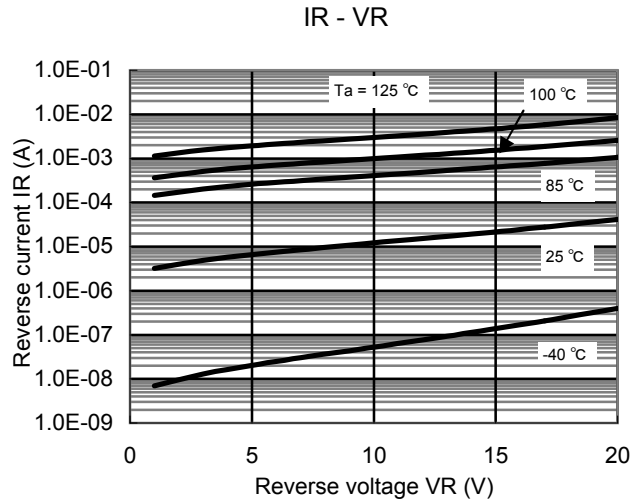
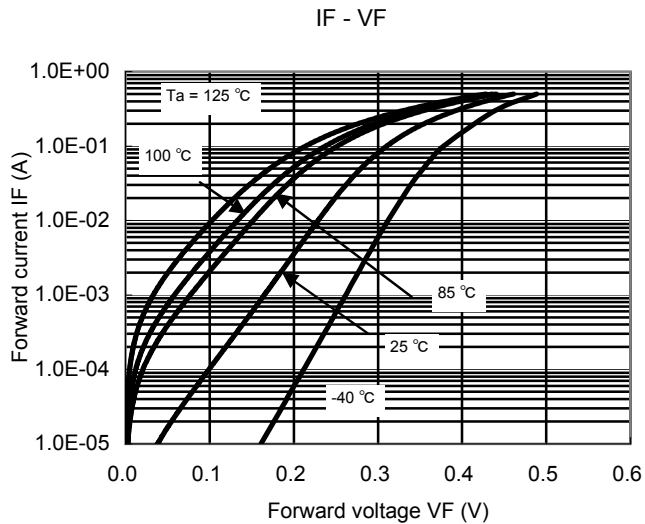
■ Electrical Characteristics Ta = 25 °C ± 3 °C

| Parameter                | Symbol | Conditions                                      | Min | Typ | Max | Unit |
|--------------------------|--------|-------------------------------------------------|-----|-----|-----|------|
| Forward voltage          | VF1    | IF = 10 mA                                      |     |     | 0.3 | V    |
|                          | VF2    | IF = 500 mA                                     |     |     | 0.5 | V    |
| Reverse current          | IR     | VR = 10 V                                       |     |     | 30  | μA   |
| Terminal capacitance     | Ct     | VR = 10 V, f = 1 MHz                            |     | 7   |     | pF   |
| Reverse recovery time *1 | trr    | IF = IR = 100 mA,<br>Irr = 0.1 × IR, RL = 100 Ω |     | 2.4 |     | ns   |

- Note: 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.
3. Absolute frequency of input and output is 400 MHz.
4. \*1 : trr measurement circuit



Technical Data ( reference )

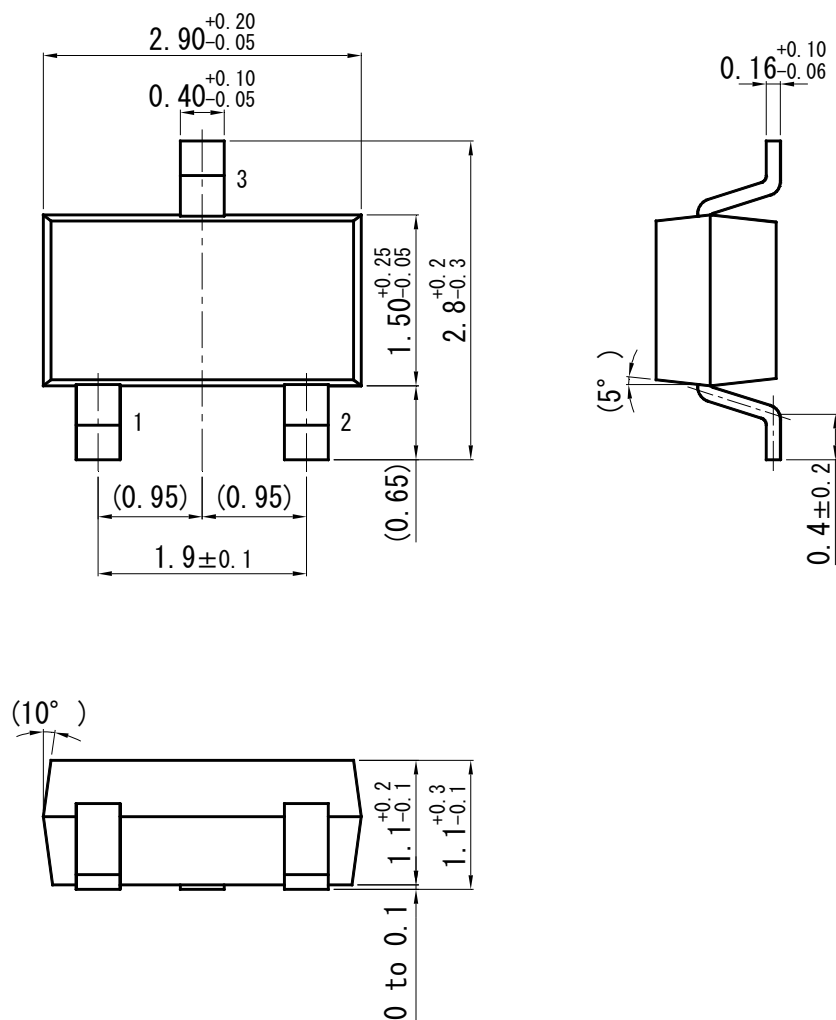


**Panasonic**

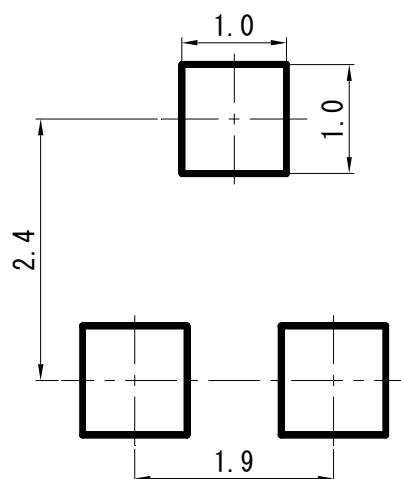
Schottky Barrier Diode  
**DB3X209K0L**

Mini3-G3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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