

### PSBD3D40V1H

# Schottky Barrier Diode

#### Feature

- Ultra Small mold type. (SOD-323)
- Low I<sub>R</sub>
- High reliability.

#### Applications

Low current rectification

#### Construction

Silicon epitaxial planar

#### **Mechanical Characteristics**

- Lead finish:100% matte Sn(Tin)
- Mounting position: Any
- Qualified max reflow temperature:260°C
- Pure tin plating: 7 ~ 17 um
- ➢ Pin flatness:≤3mil

### Electrical characteristics per line@25°C

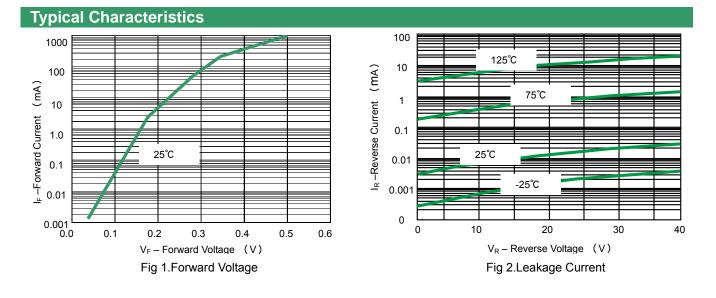
| Parameter               | Symbol         | Min. | Тур. | Max. | Unit | Conditions                    |
|-------------------------|----------------|------|------|------|------|-------------------------------|
| Forward voltage         | V <sub>F</sub> | -    | 0.5  | 0.55 | V    | I <sub>F</sub> =1A            |
| Forward voltage         | V <sub>F</sub> | -    | 0.43 | 0.48 | V    | I <sub>F</sub> =0.5A          |
| Reverse current         | I <sub>R</sub> | -    | -    | 0.1  | mA   | V <sub>R</sub> =40V           |
| Junction<br>Capacitance | Cj             | -    | 120  | -    | pF   | V <sub>R</sub> =0V<br>f =1MHz |

### Absolute maximum rating@25°C

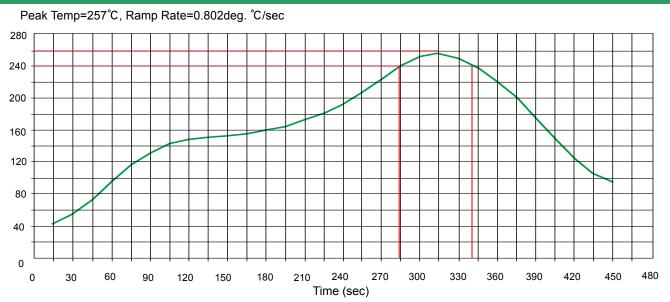
| Parameter                            | Symbol            | limits      | Unit |
|--------------------------------------|-------------------|-------------|------|
| Reverse voltage(repetitive peak)     | V <sub>RM</sub>   | 45          | V    |
| Reverse voltage (DC)                 | V <sub>R</sub>    | 40          | V    |
| Average rectified forward current    | l <sub>o</sub>    | 1           | А    |
| Repetitive peak forward current      | I <sub>FSRM</sub> | 25          | A    |
| Power Dissipation                    | PD                | 500         | mW   |
| Operating Junction temperature Range | Tj                | -55 to 125  | ٦°   |
| Storage temperature                  | T <sub>stg</sub>  | -40 to +125 | ٦°   |

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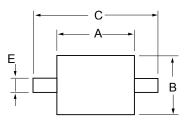
### **Solder Reflow Recommendation**

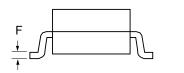


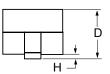
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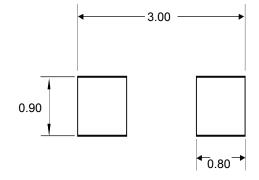
# Product dimension (SOD-323)







| Dim | Incł  | nes   | Millimeters |      |  |
|-----|-------|-------|-------------|------|--|
|     | MIN   | МАХ   | MIN         | MAX  |  |
| А   | 0.063 | 0.075 | 1.60        | 1.90 |  |
| В   | 0.045 | 0.057 | 1.15        | 1.45 |  |
| С   | 0.090 | 0.106 | 2.30        | 2.70 |  |
| D   | 0.031 | 0.043 | 0.80        | 1.00 |  |
| E   | 0.010 | 0.01  | 0.25        | 0.40 |  |
| F   | 0.004 | 0.007 | 0.09        | 0.18 |  |
| н   | 0.000 | 0.004 | 0.00        | 0.10 |  |



Unit:mm

# Ordering information

| Device      | Package          | Shipping           |  |
|-------------|------------------|--------------------|--|
| PSBD3D40V1H | SOD-323(Pb-free) | 3000 / Tape & Reel |  |

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