

Schottky barrier diode

RB521S-40

●Applications

Rectifying small power

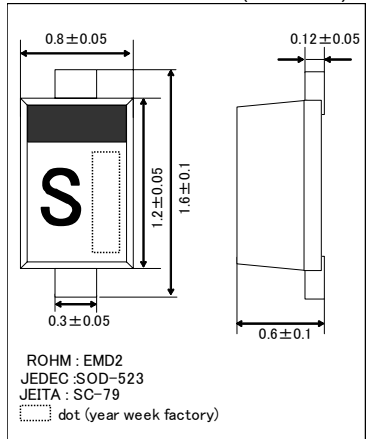
●Features

- 1) Ultra small mold type. (EMD2)
- 2) Low V_F
- 3) High reliability

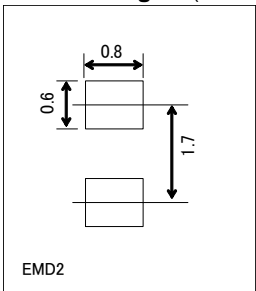
●Construction

Silicon epitaxial planar

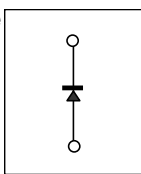
●External dimensions (Unit : mm)



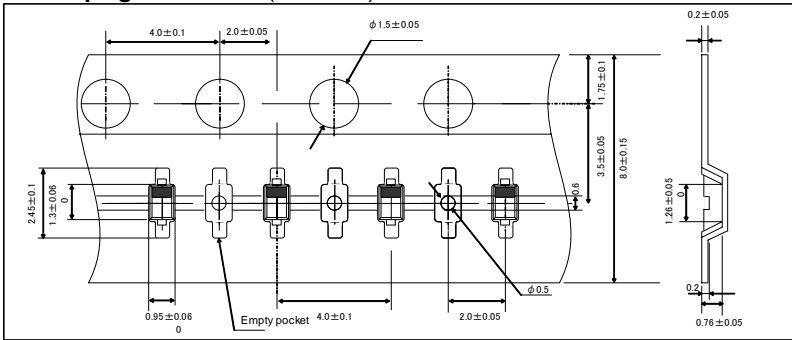
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings ($T_a=25^\circ\text{C}$)

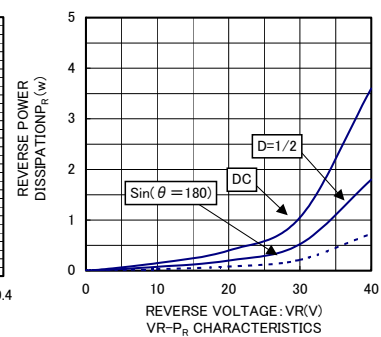
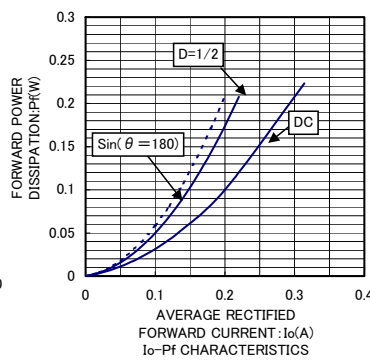
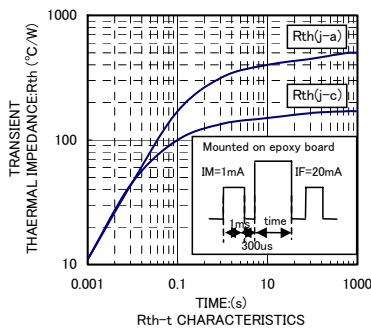
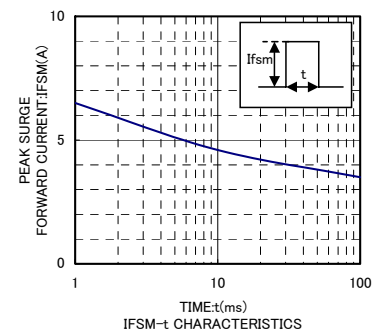
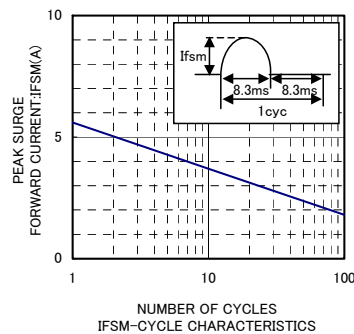
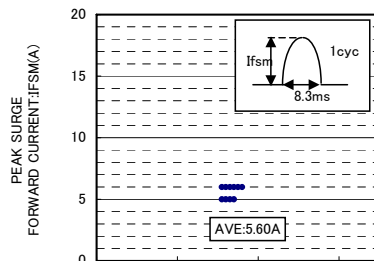
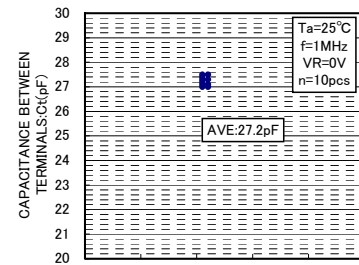
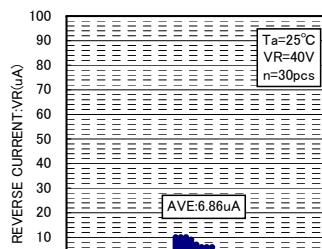
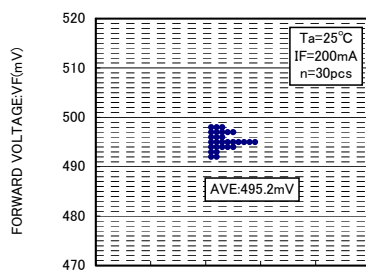
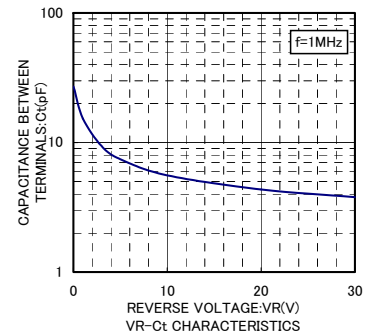
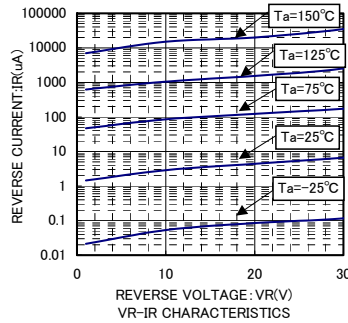
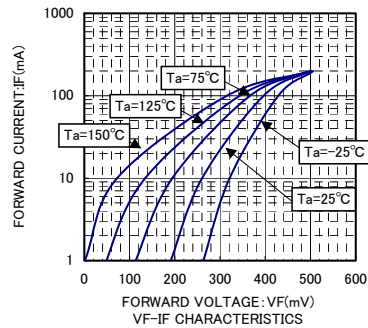
| Parameter | Symbol | Limits | Unit |
|--|-----------|-------------|------------------|
| Reverse voltage (repetitive peak) | V_{RM} | 45 | V |
| Reverse voltage (DC) | V_R | 40 | V |
| Average rectified forward current | I_o | 200 | mA |
| Forward current surge peak (60Hz·1cyc) | I_{FSM} | 4 | A |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

●Electrical characteristic ($T_a=25^\circ\text{C}$)

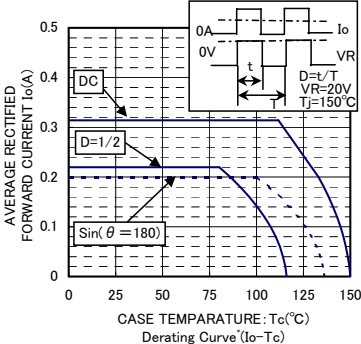
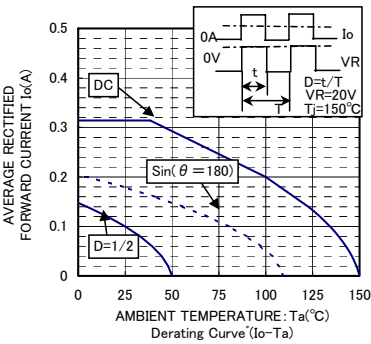
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|------------------------|--------|------|------|-------|---------------|--|
| Forward voltage | V_F | 0.16 | 0.26 | 0.30 | V | $I_F=10\text{mA}$ |
| | | 0.31 | 0.40 | 0.45 | | $I_F=100\text{mA}$ |
| | | 0.41 | 0.50 | 0.54 | | $I_F=200\text{mA}$ |
| Reverse current | IR | - | 2.50 | 20.00 | μA | $V_R=10\text{V}$ |
| | | - | 6.00 | 90.00 | | $V_R=40\text{V}$ |
| ESD break down voltage | ESD | 10 | - | - | kV | $C=100\text{pF}$, $R=1.5\text{k}\Omega$ forward and reverse : 1 time |

Diodes

●Electrical characteristic curves



Diodes



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