

Switching Diode

1SS400SM

●Applications

High frequency switching

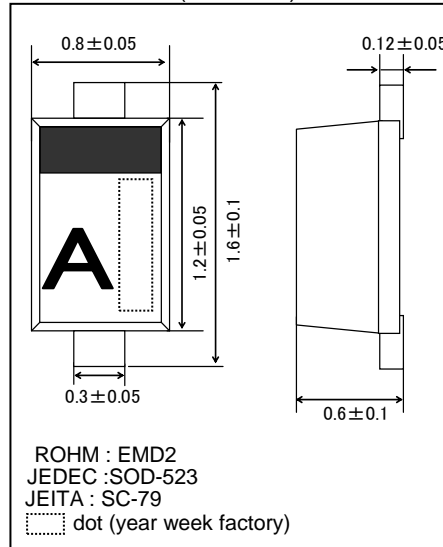
●Features

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

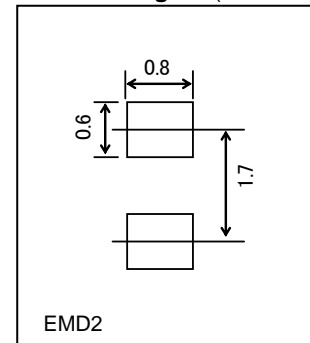
●Construction

Silicon epitaxial

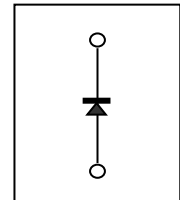
●Dimensions (Unit : mm)



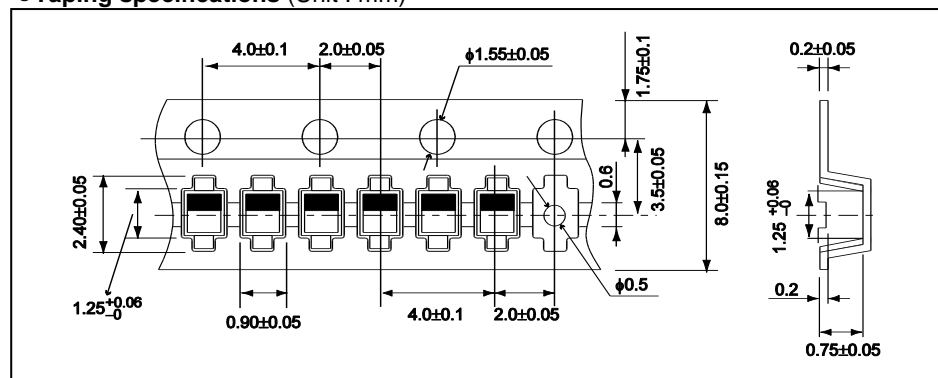
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)

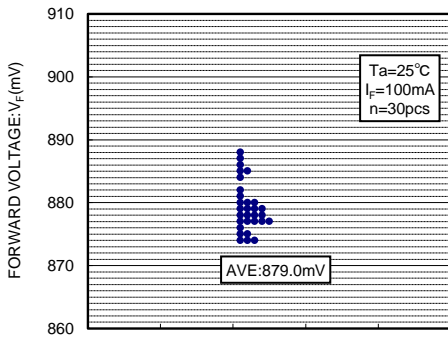
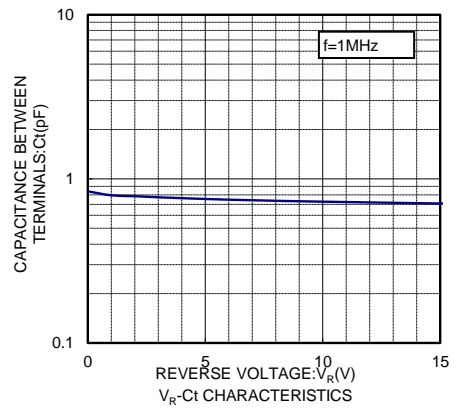
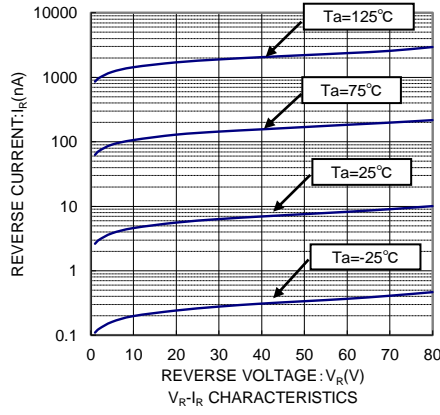
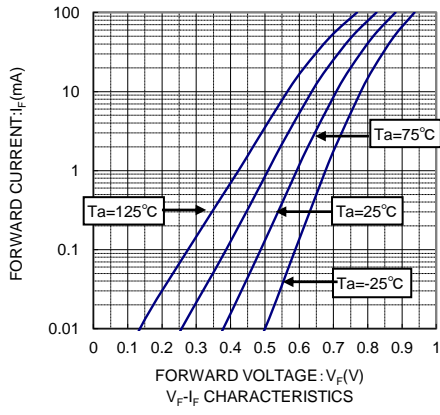


●Absolute maximum ratings (Ta=25°C)

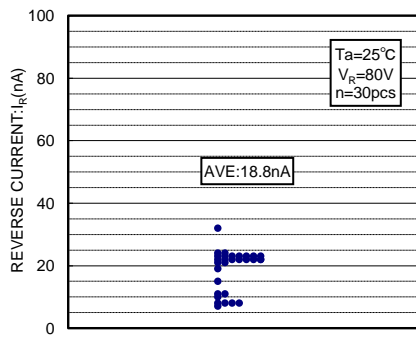
| Parameter | Symbol | Limits | Unit |
|-----------------------------------|-------------|-------------|------|
| Reverse voltage (repetitive) | V_{RM} | 90 | V |
| Reverse voltage (DC) | V_R | 80 | V |
| Forward voltage (repetitive peak) | I_{FM} | 225 | mA |
| Average rectified forward current | I_o | 100 | mA |
| Surge current (t=1s) | I_{surge} | 500 | mA |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -55 to +150 | °C |

●Electrical characteristics (Ta=25°C)

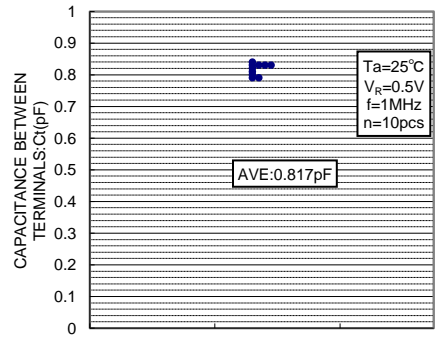
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------------------|----------|------|------|------|------|-----------------------------------|
| Forward voltage | V_F | - | - | 1.2 | V | $I_F=100mA$ |
| Reverse current | I_R | - | - | 0.1 | μA | $V_R=80V$ |
| Capacitance between terminals | C_t | - | - | 3 | pF | $V_R=0.5V, f=1MHz$ |
| Reverse recovery time | t_{rr} | - | - | 4 | ns | $V_R=6V, I_F=10mA, R_L=100\Omega$ |



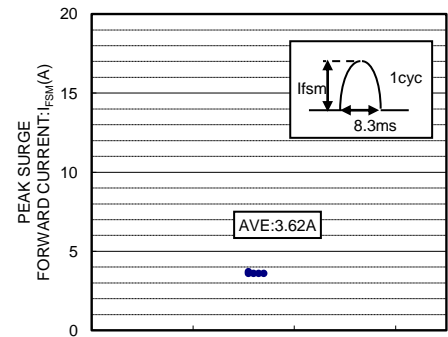
V_F DISPERSION MAP



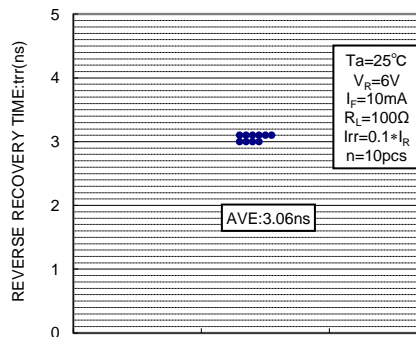
I_R DISPERSION MAP



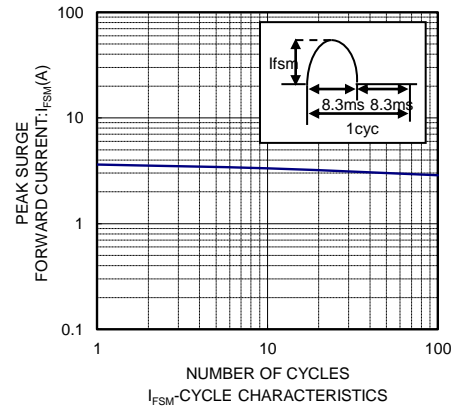
C_t DISPERSION MAP



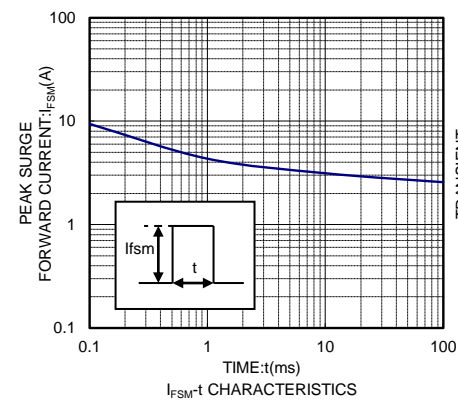
I_{FSM} DISPERSION MAP



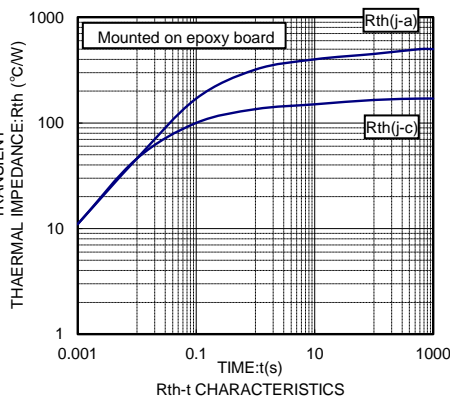
t_{rr} DISPERSION MAP



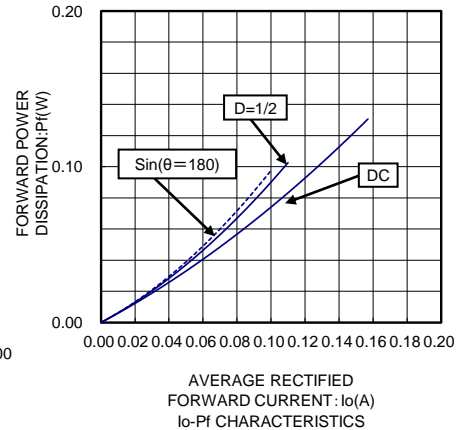
I_{FSM} -CYCLE CHARACTERISTICS



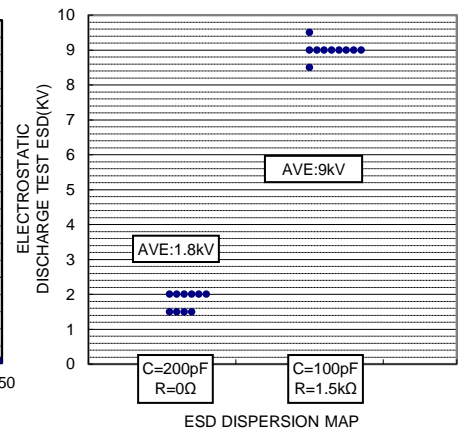
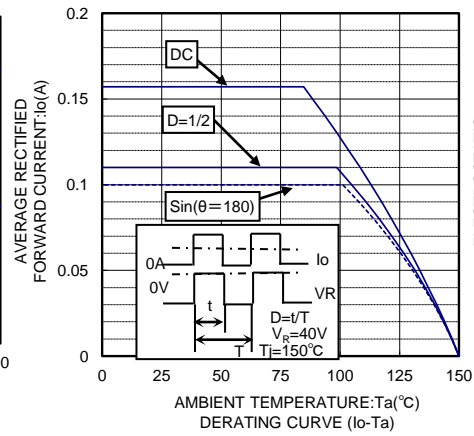
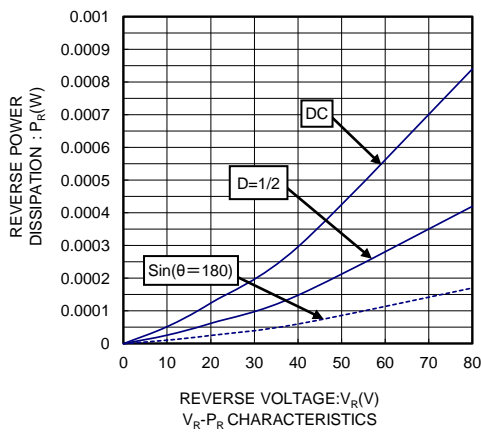
I_{FSM} - t CHARACTERISTICS



R_{th} - t CHARACTERISTICS



AVERAGE RECTIFIED FORWARD CURRENT I_o (A) I_o - P CHARACTERISTICS



Notes

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