MA3SD29F

Silicon epitaxial planar type

For super high speed switching circuits

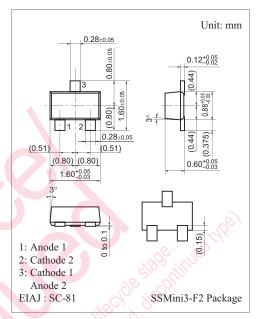
■ Features

- Low forward voltage V_F : < 0.42 V (at $I_F = 100 \text{ mA}$)
- Optimum for high-frequency rectification
- Short reverse recovery time t_{rr}

■ Absolute Maximum Ratings $T_a = 25$ °C

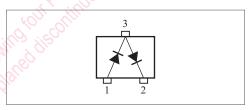
| Parameter | Symbol | Rating | Unit | | |
|---|--------|------------------|-------------|----|--|
| Reverse voltage | | V_R | 30 | V | |
| Repetitive peak reverse voltage | | V _{RRM} | 30 | V | |
| Forward current (Average) | Single | т | 100 | mA | |
| | Series | $I_{F(AV)}$ | 75 | | |
| Peak forward current | Single | T | 200 | mA | |
| | Series | I_{FM} | 150 | | |
| Non-repetitive peak forward surge current * | | I _{FSM} | 1 | A | |
| Junction temperature | | T _j | 125 | °C | |
| Storage temperature | | T _{stg} | -55 to +125 | °C | |

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



Marking Symbol: M5R

Internal Connection



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

| Parameter | Symbol | Conditions | Min | Тур | Max | Unit |
|-------------------------|-----------------|--|-----|------|------|------|
| Forward voltage | V_{F1} | $I_F = 10 \text{ mA}$ | | 0.25 | 0.29 | V |
| | V_{F2} | $I_F = 100 \text{ mA}$ | | 0.39 | 0.42 | |
| Reverse current | I_{R1} | $V_{R^j} = 10 \text{ V}$ | | | 25 | μΑ |
| | I_{R2} | $V_{R^l} = 30 \text{ V}$ | | | 120 | |
| Terminal capacitance | Mon Ct | $V_{RJ} = 0 \text{ V, } f = 1 \text{ MHz}$ | | 11 | | pF |
| Reverse recovery time * | t _{rr} | $I_F = I_{Rl} = 100 \text{ mA}, I_{rr} = 10 \text{ mA},$ $R_{Ll} = 100 \Omega$ | | 1 | | ns |

- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
 - 2. Absolute frequency of input and output is 250 MHz
 - 3. 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.
 - 4. *: t_{rr} measurement circuit

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