



SANYO Semiconductors

# DATA SHEET

## RE0208M — Fast Recovery Diode for Flash Circuit 800V, 200mA Rectifier

### Applications

- Voltage rectification for flash circuit etc.

### Features

- High voltage ( $V_{RRM}=800V$ ).
- Reverse recovery time is fast.
- Ultrasmall-size package permitting applied sets to be small and slim.
- Halogen free compliance.

### Specifications

Absolute Maximum Ratings at  $T_a=25^\circ C$

| Parameter                                | Symbol    | Conditions                           | Ratings     | Unit       |
|--|-----------|--------------------------------------|-------------|------------|
| Repetitive Peak Reverse Voltage          | $V_{RRM}$ |                                      | 800         | V          |
| Nonrepetitive Peak Reverse Surge Voltage | $V_{RSM}$ |                                      | 800         | V          |
| Average Output Current                   | $I_O$     | DC.When mounted on ceramic substrate | 0.2         | A          |
| Surge Forward Current                    | $I_{FSM}$ | 50Hz sine wave, 1 cycle              | 1           | A          |
| Junction Temperature                     | $T_j$     |                                      | -55 to +150 | $^\circ C$ |
| Storage Temperature                      | $T_{stg}$ |                                      | -55 to +150 | $^\circ C$ |

Electrical Characteristics at  $T_a=25^\circ C$

| Parameter       | Symbol   | Conditions  | Ratings |     |     | Unit    |
|-----------------|----------|-------------|---------|-----|-----|---------|
|                 |          |             | min     | typ | max |         |
| Reverse Voltage | $V_R$    | $I_R=1mA$   | 800     |     |     | V       |
| Forward Voltage | $V_{F1}$ | $I_F=10mA$  |         | 1.3 | 1.6 | V       |
|                 | $V_{F2}$ | $I_F=100mA$ |         | 3.2 | 4.0 | V       |
| Reverse Current | $I_{R1}$ | $V_R=400V$  |         |     | 3   | $\mu A$ |
|                 | $I_{R2}$ | $V_R=800V$  |         |     | 50  | $\mu A$ |

Marking : 2B

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# RE0208M

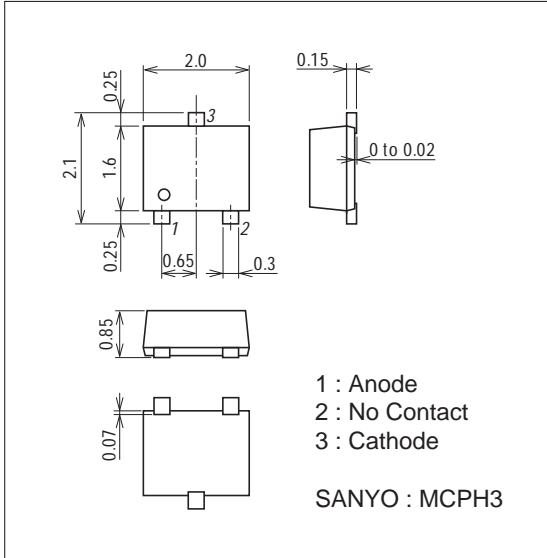
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| Parameter             | Symbol        | Conditions   | Ratings |     |     | Unit                          |
|-----------------------|---------------|--|---------|-----|-----|-------------------------------|
|                       |               |  | min     | typ | max |                               |
| Reverse Recovery Time | $t_{rr}$      | $I_F=I_R=100\text{mA}$ , See specified Test Circuit. |         | 33  | 55  | ns                            |
| Thermal Resistance    | $R_{th(j-c)}$ | When mounted on ceramic substrate (40mmx50mmx0.8mm)  |         | 120 |     | $^{\circ}\text{C} / \text{W}$ |

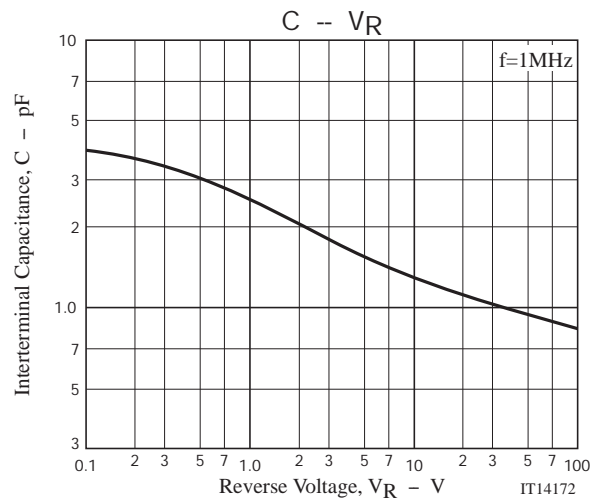
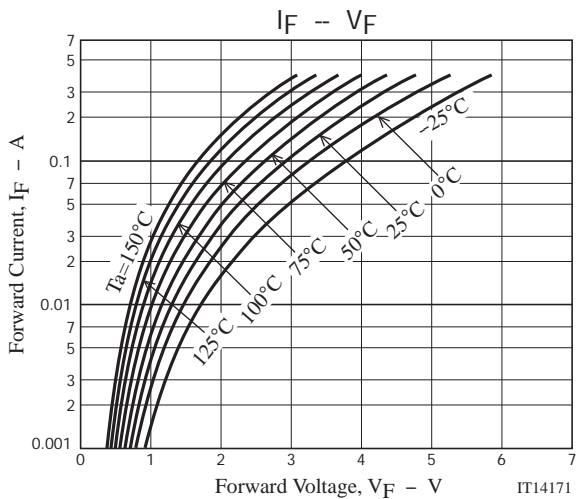
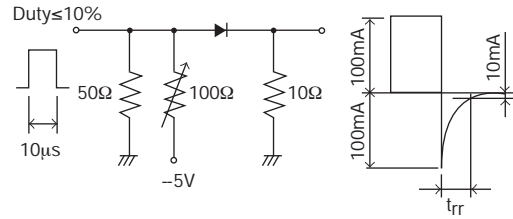
## Package Dimensions

unit : mm (typ)

7019A-001



## $t_{rr}$ Test Circuit



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