

## Schottky Barrier Diodes

## MA3XD14E

## ■ Features

- Mini type 3-pin package
- Low forward rise voltage  $V_F$  ( $V_F < 0.4$  V)
- Cathode common type

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

| Parameter  | Symbol          | Rating      | Unit             |
|--|-----------------|-------------|------------------|
| Reverse voltage (DC)                               | $V_R$           | 20          | V                |
| Repetitive peak reverse-voltage                    | $I_{RRM}$       | 20          | V                |
| Non-repetitive peak forward-surge-current (Note 2) | $I_{FSM}$       | 1           | A                |
| Forward current (DC)                               | Single          | 100         | mA               |
|  | Double (Note 1) | 70          |                  |
| Peak forward current                               | Single          | 300         | mA               |
|  | Double (Note 1) | 200         |                  |
| Junction temperature                               | $T_j$           | 125         | $^\circ\text{C}$ |
| Storage temperature                                | $T_{stg}$       | -55 to+ 150 | $^\circ\text{C}$ |

Note

1 : The value for operating one chip

2 : The peak-to-peak value in one cycle of 50 Hz sine-wave (non-repetitive)

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

| Parameter              | Symbol   | Conditions   | Min | Typ | Max  | Unit          |
|------------------------|----------|--|-----|-----|------|---------------|
| Reverse current (DC)   | $I_R$    | $V_R = 10$ V   |     |     | 20   | $\mu\text{A}$ |
| Forward voltage (DC)   | $V_F$    | $I_F = 5$ mA   |     |     | 0.27 | V             |
|                        |          | $I_F = 100$ mA   |     |     | 0.40 | V             |
| Terminal capacitance   | $C_t$    | $V_R = 0$ V, $f = 1$ MHz                                   |     | 25  |      | pF            |
| Reverse recovery time* | $t_{rr}$ | $I_F = I_R = 100$ mA, $I_{rr} = 10$ mA, $R_L = 100 \Omega$ |     | 3.0 |      | ns            |

Note

1. 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.

2. Rated input/output frequency: 400 MHz

3. \* :  $t_{rr}$  measuring circuit

## ■ Marking

|         |     |
|---------|-----|
| Marking | M5H |
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