

MA3X152D (MA152WA), MA3X152E (MA152WK)

Silicon epitaxial planar type

For high-speed switching circuits

■ Features

- Short reverse recovery time t_{rr}
- Small terminal capacitance, C_t

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

| Parameter | Symbol | Rating | Unit |
|---------------------------------------------|-----------|-------------|------------------|
| Reverse voltage | V_R | 80 | V |
| Maximum peak reverse voltage | V_{RM} | 80 | V |
| Forward current | Single | I_F | 100 |
| | Double | | 150 |
| Peak forward current | Single | I_{FM} | 225 |
| | Double | | 340 |
| Non-repetitive peak forward surge current * | Single | I_{FSM} | 500 |
| | Double | | 750 |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

Note) *: $t = 1\text{ s}$

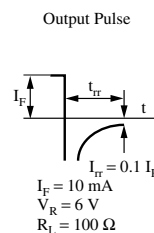
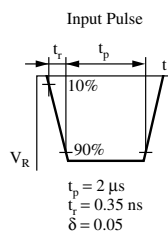
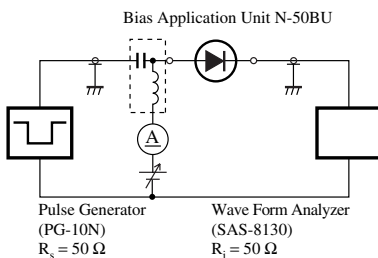
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|-------------------------|----------|---------------------------------------------------------------------------------|-----|-----|-----|------|
| Forward voltage | V_F | $I_F = 100\text{ mA}$ | | | 1.2 | V |
| Reverse voltage | V_R | $I_R = 100\ \mu\text{A}$ | 80 | | | V |
| Reverse current | I_R | $V_R = 75\text{ V}$ | | | 100 | nA |
| Terminal capacitance | MA3X152D | $V_R = 0\text{ V}, f = 1\text{ MHz}$ | | | 15 | pF |
| | MA3X152E | | | | 2 | |
| Reverse recovery time * | MA3X152D | $I_F = 10\text{ mA}, V_R = 6\text{ V}$ $I_{rr} = 0.1 I_R, R_L = 100\ \Omega$ | | | 10 | ns |
| | MA3X152E | | | | 3 | |

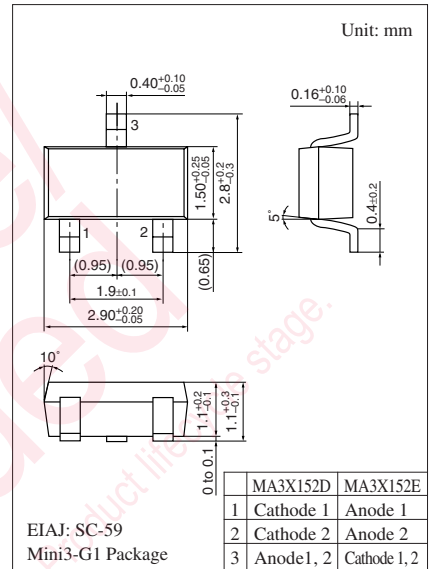
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring method for diodes.

2. Absolute frequency of input and output is 100 MHz.

3. *: t_{rr} measurement circuit



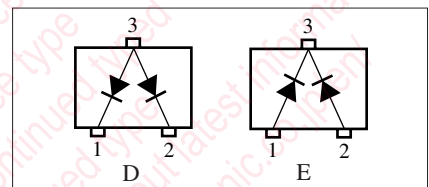
Note) The part numbers in the parenthesis show conventional part number.



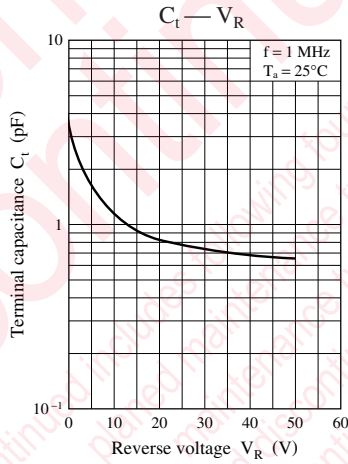
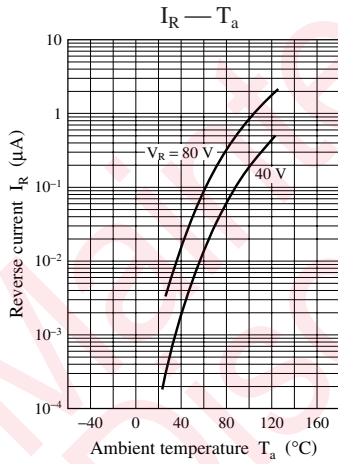
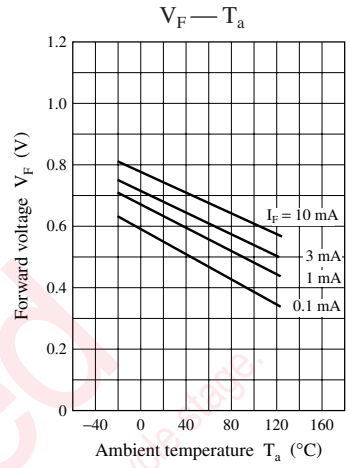
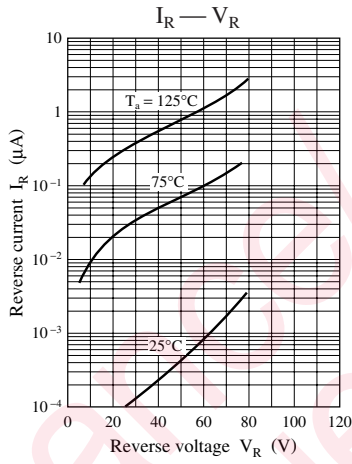
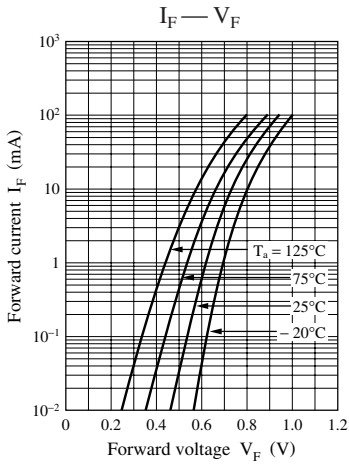
Marking Symbol

- MA3X152D: MO
- MA3X152E: MU

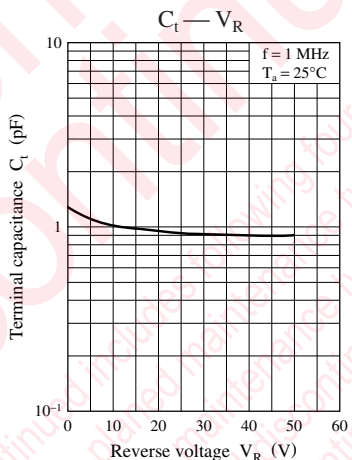
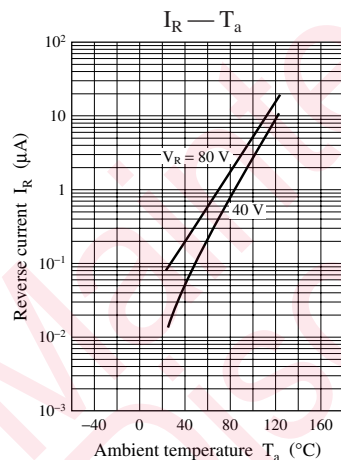
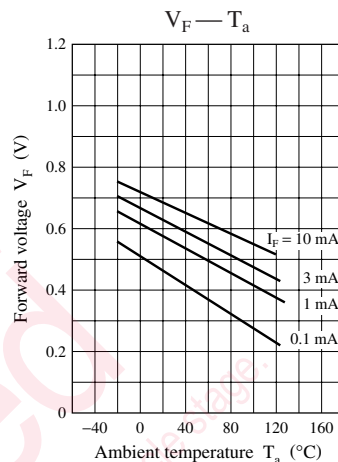
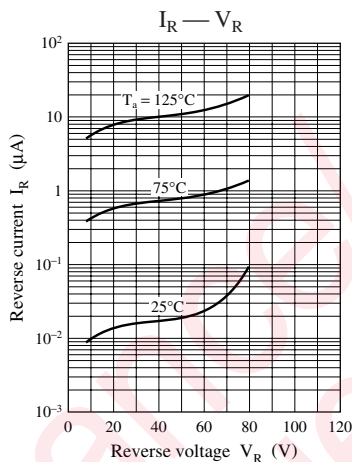
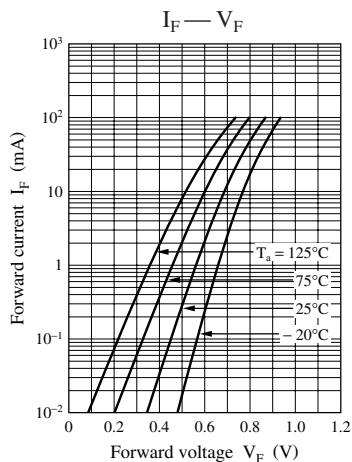
Internal Connection



Characteristics chart of MA3X152D



Characteristics chart of MA3X152E



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