

# MA3X717D (MA717WA)

Silicon epitaxial planar type

For switching

■ Features

- Two MA3X717 is contained in one package
- Forward voltage  $V_F$ , optimum for low voltage rectification
- Low  $V_F$  type of MA3X704D
- Optimum for high frequency rectification because of its short reverse recovery time ( $t_{rr}$ )

■ Package

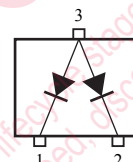
- Code  
Mini3-G1
- Pin Name  
1: Cathode 1  
2: Cathode 2  
3: Anode

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

| Parameter                    | Symbol    | Rating      | Unit             |
|------------------------------|-----------|-------------|------------------|
| Reverse voltage              | $V_R$     | 30          | V                |
| Maximum peak reverse voltage | $V_{RM}$  | 30          | V                |
| Forward current              | Single    | 30          | mA               |
|                              | Double    | 20          |                  |
| Peak forward current         | Single    | 150         | mA               |
|                              | Double    | 110         |                  |
| Junction temperature         | $T_j$     | 125         | $^\circ\text{C}$ |
| Storage time                 | $T_{stg}$ | -55 to +125 | $^\circ\text{C}$ |

■ Marking Symbol: M3E

■ Internal Connection

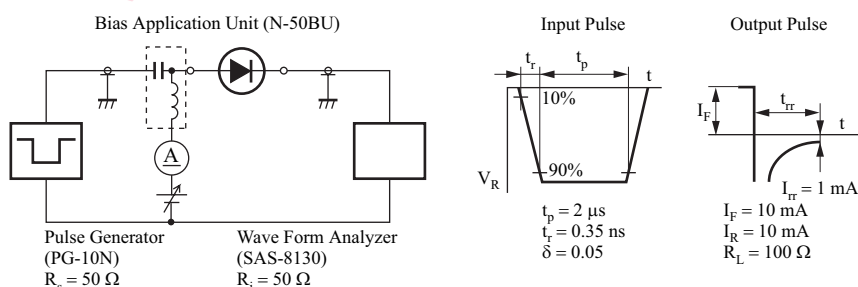


■ Electrical Characteristics  $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

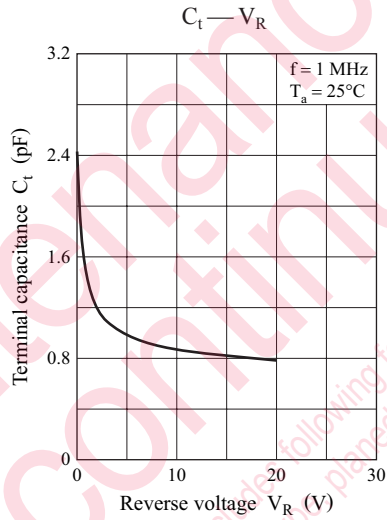
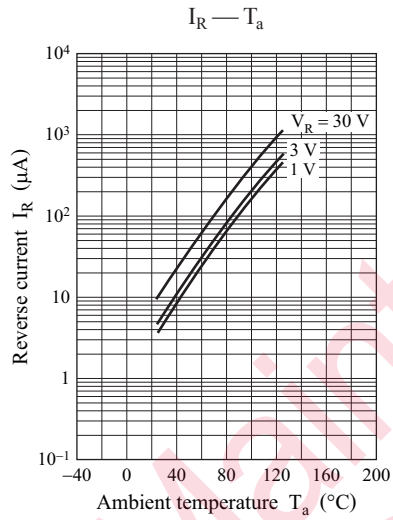
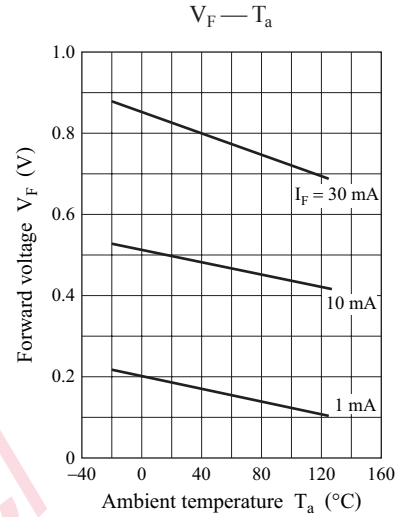
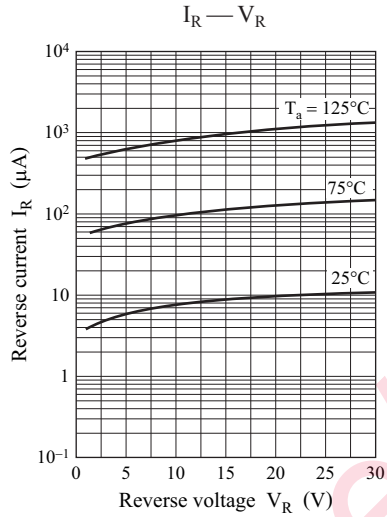
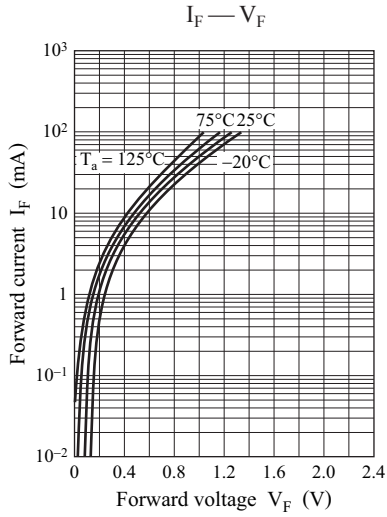
| Parameter               | Symbol   | Conditions  | Min | Typ | Max | Unit          |
|-------------------------|----------|---|-----|-----|-----|---------------|
| Forward voltage         | $V_{F1}$ | $I_F = 1 \text{ mA}$  |     |     | 0.3 | V             |
|                         | $V_{F2}$ | $I_F = 30 \text{ mA}$   |     |     | 1.0 |               |
| Reverse current         | $I_R$    | $V_R = 30 \text{ V}$  |     |     | 30  | $\mu\text{A}$ |
| Terminal capacitance    | $C_t$    | $V_R = 1 \text{ V}, f = 1 \text{ MHz}$  |     | 1.5 |     | pF            |
| Reverse recovery time * | $t_{rr}$ | $I_F = I_R = 10 \text{ mA}, I_{rr} = 1 \text{ mA}, R_L = 100 \Omega$                        |     | 1.0 |     | ns            |
| Detection efficiency    | $\eta$   | $V_{IN} = 3 V_{(peak)}, f = 30 \text{ MHz}, R_L = 3.9 \text{ k}\Omega, C_L = 10 \text{ pF}$ |     | 65  |     | %             |

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

2. 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.
3. Absolute frequency of input and output is 2 GHz
4. \*:  $t_{rr}$  measurement circuit

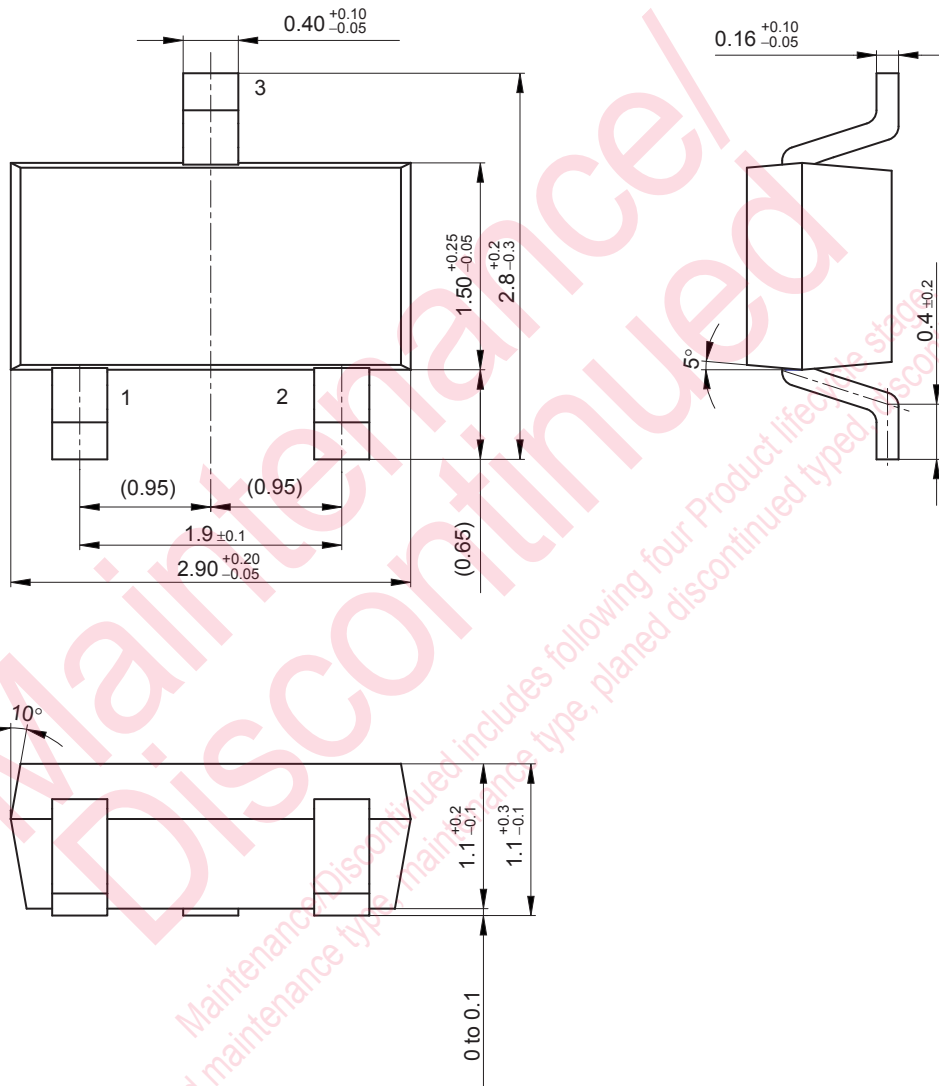


Note) The part number in the parenthesis shows conventional part number.



Mini3-G1

Unit: mm



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