# MA3S795D (MA795WA)

## Silicon epitaxial planar type

For switching

### ■ Features

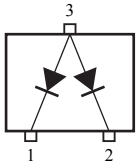
- High-density mounting is possible
- Forward voltage $V_F$ , optimum for low voltage rectification: $V_F < 0.3$ V
- Optimum for high frequency rectification because of its short reverse recovery time $t_{rr}$

### ■ Package

- Code
  SSMini3-F2
- Pin Name
  1: Cathode 1
  2: Cathode 2
  3: Anode

### ■ Marking Symbol: M3E

### ■ Internal Connection



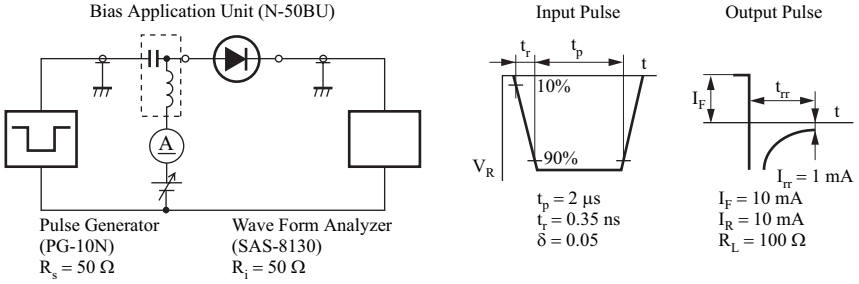

### ■ Absolute Maximum Ratings $T_a = 25°C$

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

### ■ Electrical Characteristics $T_a = 25°C \pm 3°C$

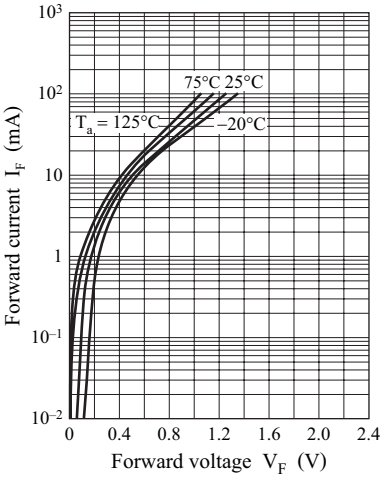
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Forward voltage | $V_{F1}$ | $I_F = 1$ mA | | | 0.3 | V |
| | $V_{F2}$ | $I_F = 30$ mA | | | 1.0 | |
| Reverse current | $I_R$ | $V_R = 30$ V | | | 30 | μA |
| Terminal capacitance | $C_t$ | $V_R = 1$ V, f =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

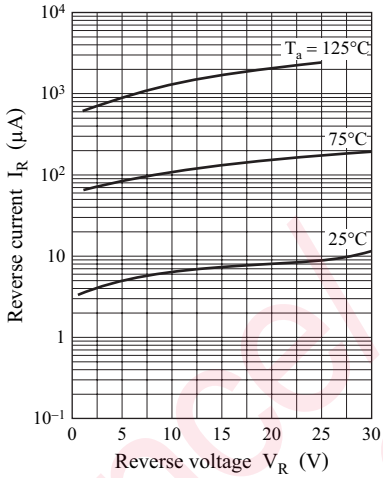



Note) The part number in the parenthesis shows conventional part number.

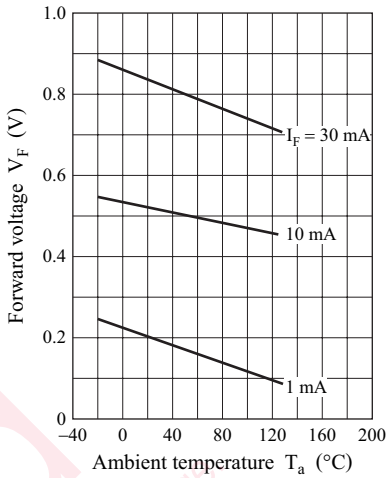
$I_F$ — $V_F$



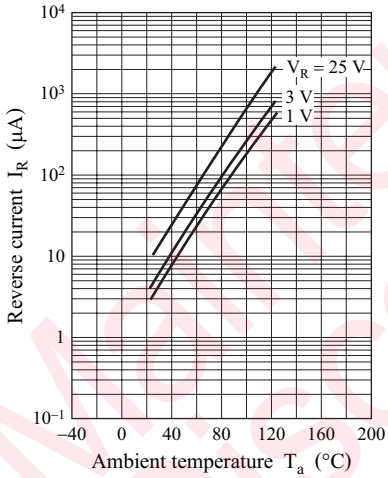

$I_R$ — $V_R$



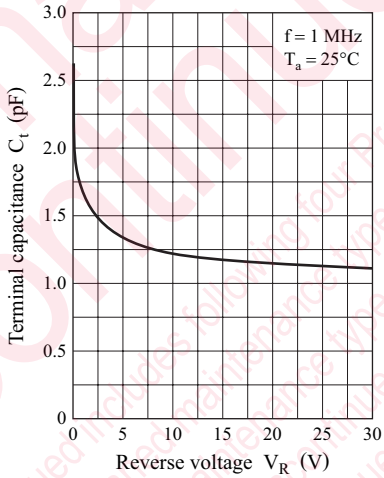

$V_F$ — $T_a$




$I_R$ — $T_a$

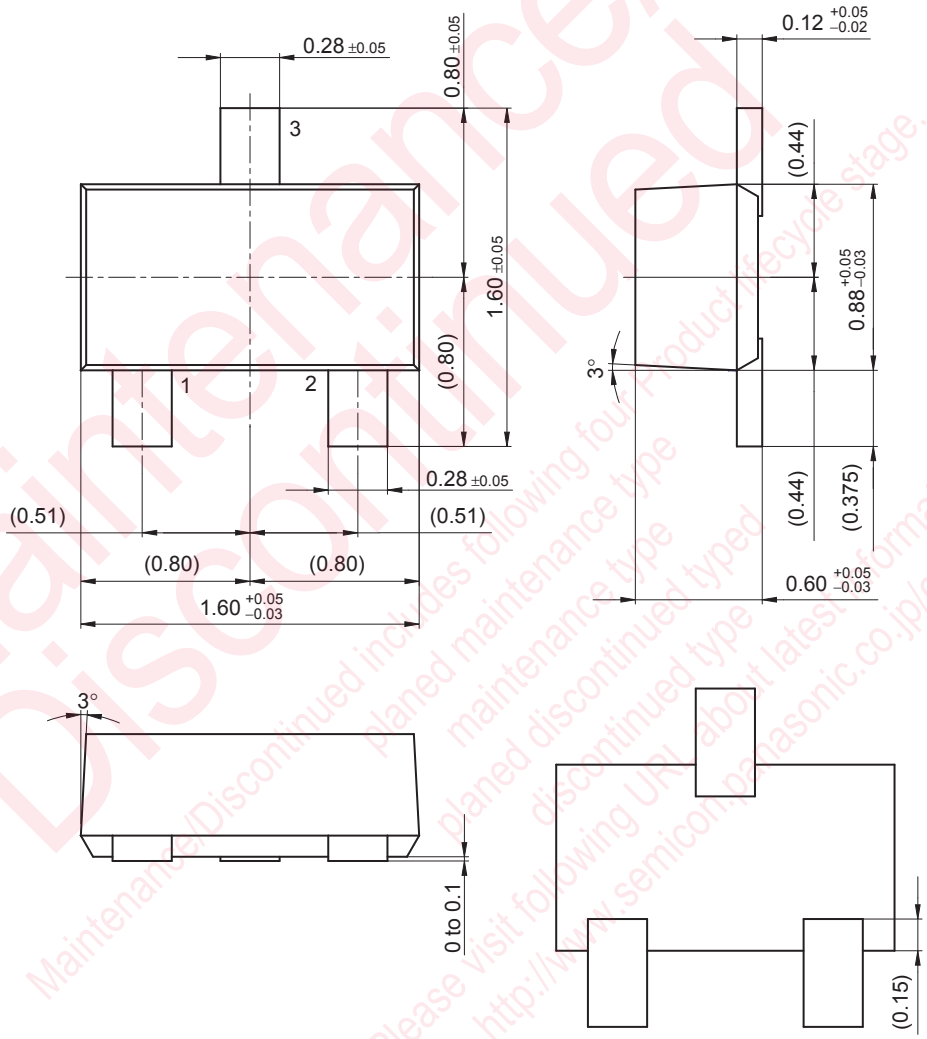



$C_t$ — $V_R$



## SSMini3-F2

Unit: mm



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