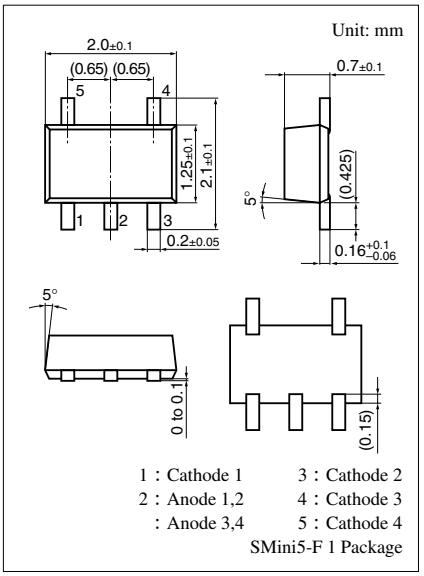
# MA5J002D

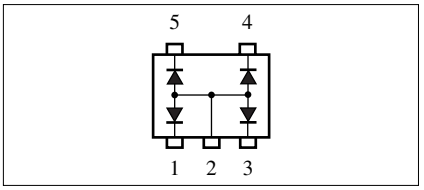
## Silicon epitaxial planar type

For high speed switching circuit




Marking Symbol: M5C

Internal Connection




### ■ Features

- S-Mini type 5-pin package
- Includes 4 elements of annode common connection
- Parts reduction is possible
- Ideal for surge voltage absorption

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

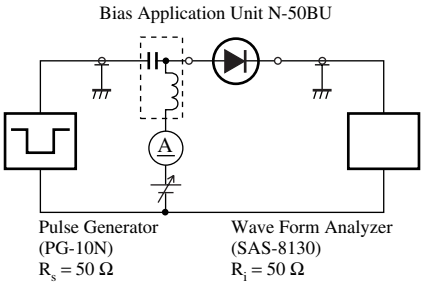
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Reverse voltage (DC) | $V_R$ | 80 | V |
| Peak reverse voltage | $V_{RM}$ | 80 | V |
| Forward current (DC) *1 | $I_F$ | 100 | mA |
| Peak forward current *1 | $I_{FM}$ | 225 | mA |
| Non-repetitive peak forward-surge-current *1, 2 | $I_{FSM}$ | 500 | mA |
| Junction temperature | $T_j$ | 150 | °C |
| Storage temperature | $T_{stg}$ | −55 to +150 | °C |

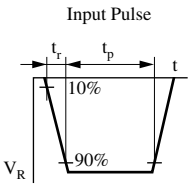
Note) *1: Value per a diode
*2: t = 1 s

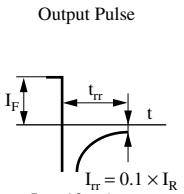
### ■ Electrical Characteristics $T_a = 25°C \pm 3°C$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Reverse current (DC) | $I_R$ | $V_R$ = 70 V | | | 100 | nA |
| Forward voltage (DC) | $V_F$ | $I_F$ = 100 mA | | | 1.3 | V |
| Reverse voltage (DC) | $V_R$ | $I_R$ = 100 µA | 80 | | | V |
| Terminal capacitance | $C_t$ | $V_R$ = 0 V, f = 1 MHz | | | 3.5 | pF |
| Reverse recovery time * | $t_{rr}$ | $I_F$ = 10 mA, $V_R$ = 6 V<br>$I_{rr}$ = 0.1 × $I_R$ , $R_L$ = 100 Ω | | | 5.0 | ns |

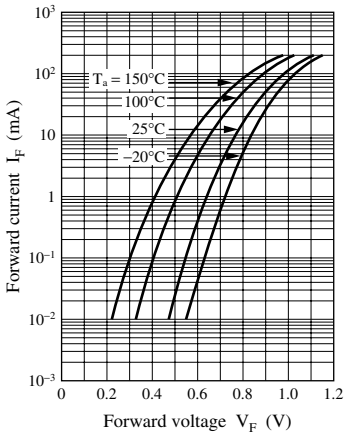
Note) 1. Rated input/output frequency: 100 MHz
2. *: $t_{rr}$ measuring instrument



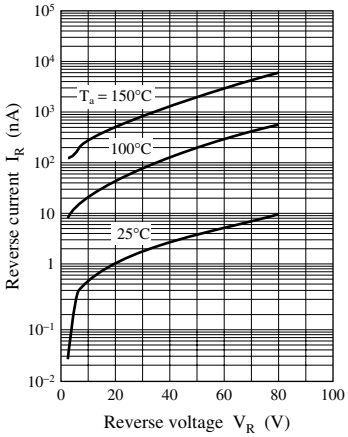



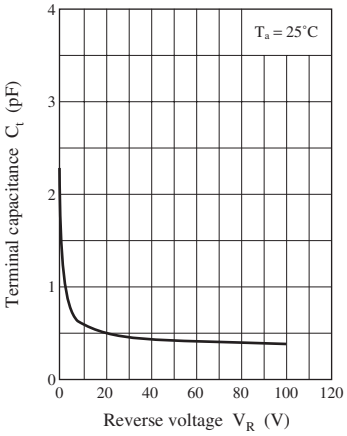
$I_F$ — $V_F$




$I_R$ — $V_R$




$C_t$ — $V_R$



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