

# MA3X720 (MA720)

## Silicon epitaxial planar type

For high frequency rectification

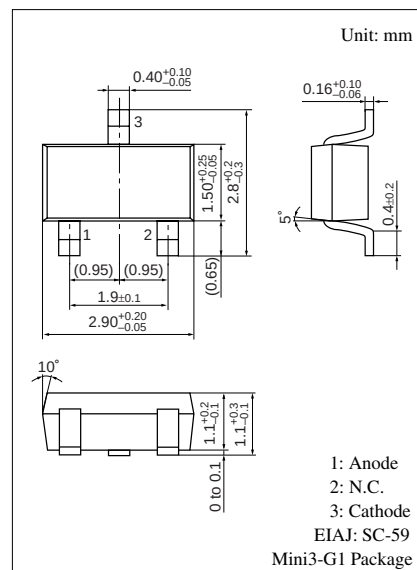
### ■ Features

- $I_{F(AV)} = 500$  mA rectification is possible
- Optimum for high frequency rectification because of its short reverse recovery time ( $t_{rr}$ )
- Low forward voltage  $V_F$  and good rectification efficiency
- Mini type 3-pin package

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

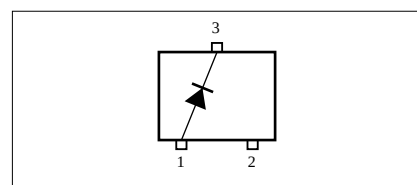
| Parameter                                   | Symbol      | Rating      | Unit             |
|---------------------------------------------|-------------|-------------|------------------|
| Reverse voltage (DC)                        | $V_R$       | 40          | V                |
| Repetitive peak reverse-voltage             | $V_{RRM}$   | 40          | V                |
| Average forward current                     | $I_{F(AV)}$ | 500         | mA               |
| Non-repetitive peak forward-surge-current * | $I_{FSM}$   | 2           | A                |
| Junction temperature                        | $T_j$       | 125         | $^\circ\text{C}$ |
| Storage temperature                         | $T_{stg}$   | -55 to +125 | $^\circ\text{C}$ |

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



Marking Symbol: M2W

Internal Connection

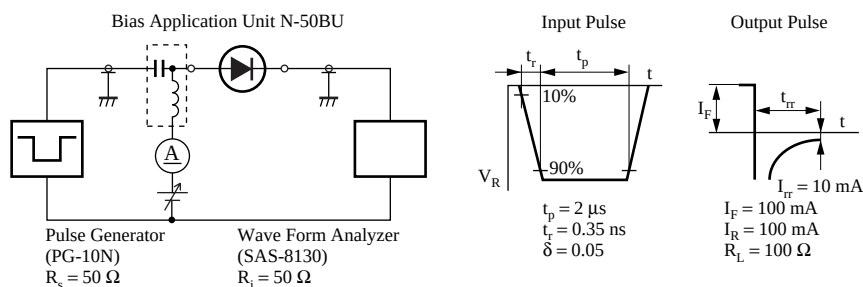


### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

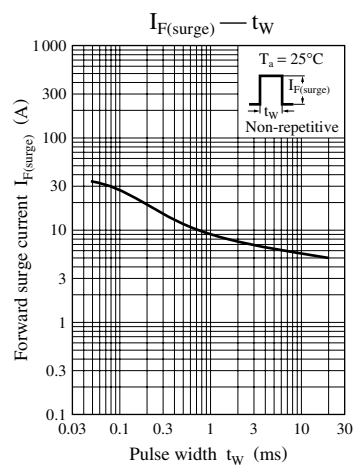
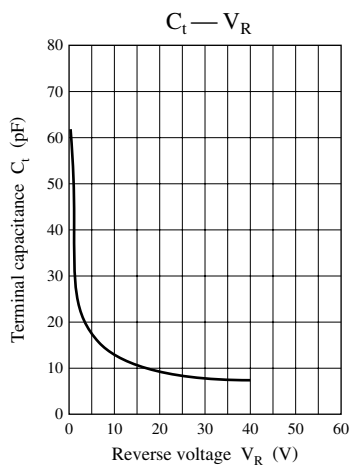
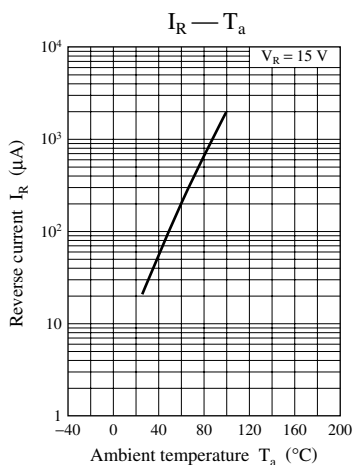
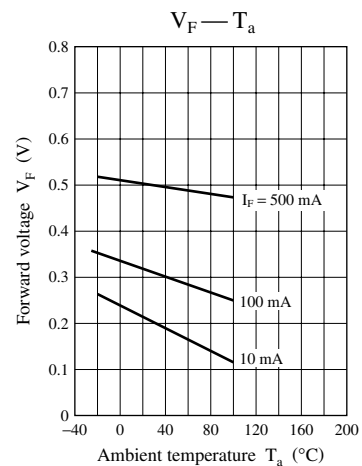
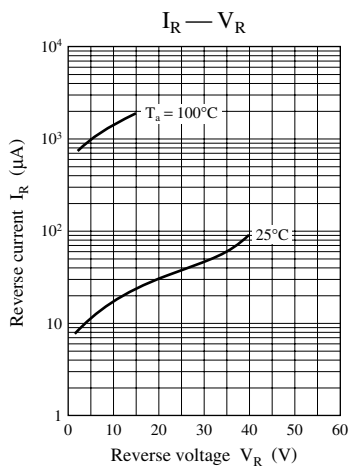
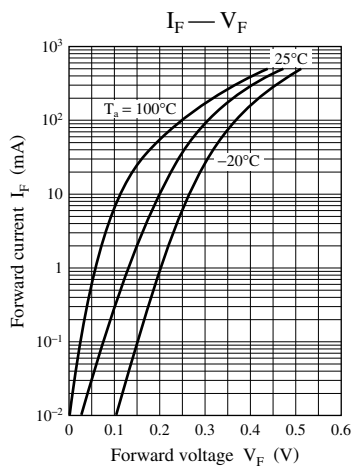
| Parameter               | Symbol   | Conditions                                                     | Min | Typ | Max  | Unit          |
|-------------------------|----------|----------------------------------------------------------------|-----|-----|------|---------------|
| Reverse current (DC)    | $I_R$    | $V_R = 35$ V                                                   |     |     | 100  | $\mu\text{A}$ |
| Forward voltage (DC)    | $V_F$    | $I_F = 500$ mA                                                 |     |     | 0.55 | V             |
| Terminal capacitance    | $C_t$    | $V_R = 0$ V, $f = 1$ MHz                                       |     | 60  |      | pF            |
| Reverse recovery time * | $t_{rr}$ | $I_F = I_R = 100$ mA<br>$I_{rr} = 10$ mA, $R_L = 100$ $\Omega$ |     | 5   |      | 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 instrument



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



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