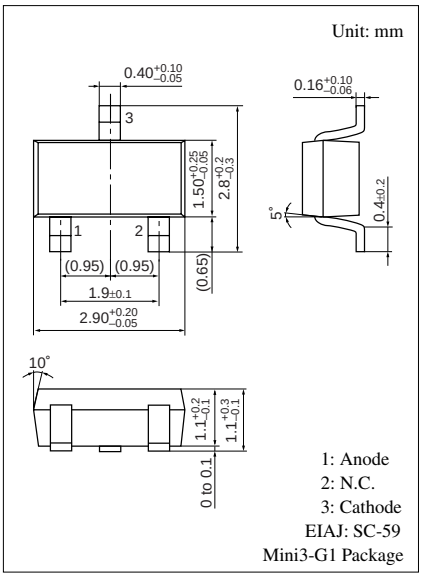
# MA3X720 (MA720)

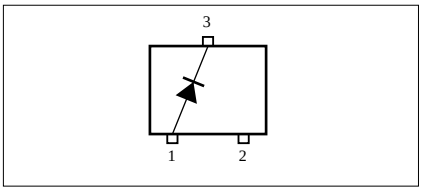
## Silicon epitaxial planar type

For high frequency rectification




Marking Symbol: M2W

Internal Connection




### ■ 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°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 | °C |
| Storage temperature | $T_{stg}$ | −55 to +125 | °C |

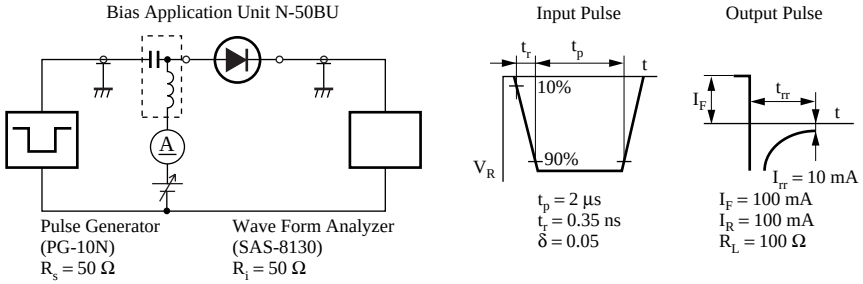
Note) *: The peak-to-peak value in one cycle of 50 Hz sine wave (non-repetitive)

### ■ Electrical Characteristics $T_a$ = 25°C

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Reverse current (DC) | $I_R$ | $V_R$ = 35 V | | | 100 | µA |
| 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 Ω | | 5 | | ns |

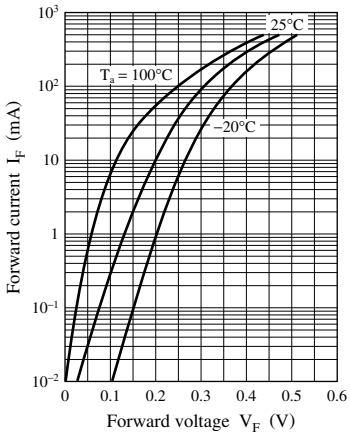
Note) 1. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.

2. Rated input/output frequency: 400 MHz 3. *: $t_{rr}$ measuring instrument

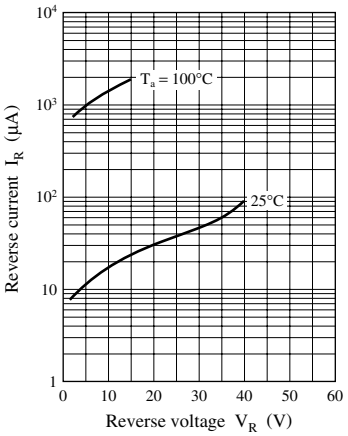



Note) The part number in the parenthesis shows conventional part number.

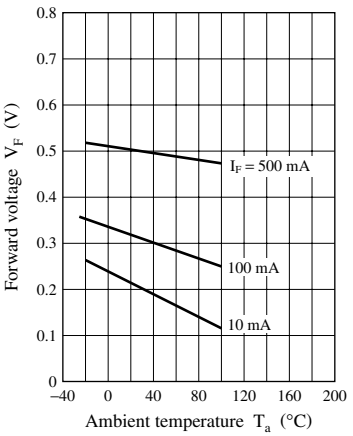
$I_F$ — $V_F$



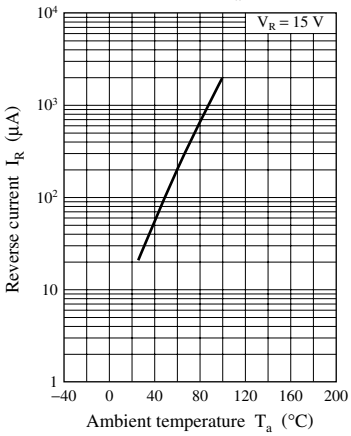

$I_R$ — $V_R$



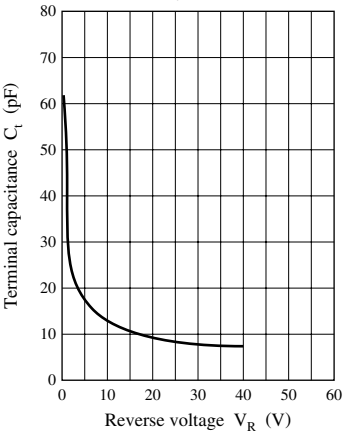

$V_F$ — $T_a$



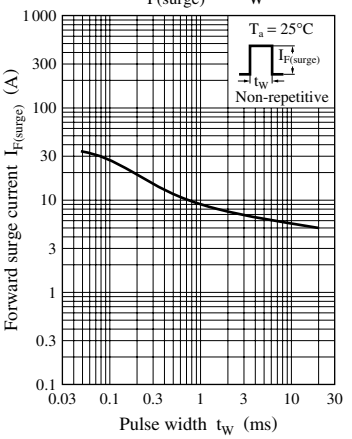

$I_R$ — $T_a$




$C_t$ — $V_R$




$I_{F(surge)}$ — $t_W$



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