

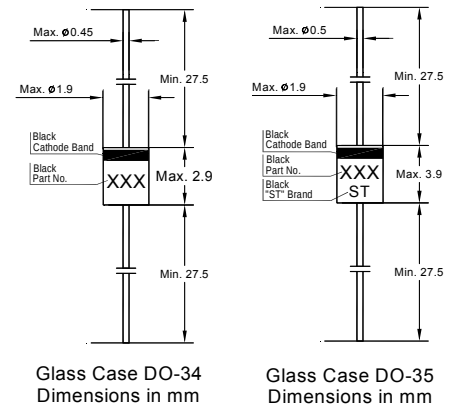
# MA700, MA700A

## Silicon Epitaxial Planar Schottky Barrier Diodes

for ordinary wave detection  
for super high speed switching

### Features

- Low forward voltage and good wave detection efficiency
- Low reverse current

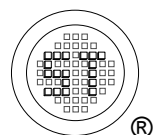


### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Parameter                 | Symbol    | Value         | Unit             |
|---------------------------|-----------|---------------|------------------|
| Peak Reverse Voltage      | $V_{RM}$  | 15            | V                |
| MA700                     |           | 30            |                  |
| Reverse Voltage           | $V_R$     | 15            | V                |
| MA700A                    |           | 30            |                  |
| Forward Current           | $I_F$     | 30            | mA               |
| Peak Forward Current      | $I_{FM}$  | 150           | mA               |
| Junction Temperature      | $T_j$     | 125           | $^\circ\text{C}$ |
| Storage Temperature Range | $T_{stg}$ | - 55 to + 125 | $^\circ\text{C}$ |

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

| Parameter                                                                                            | Symbol   | Typ. | Max. | Unit |
|------------------------------------------------------------------------------------------------------|----------|------|------|------|
| Forward Voltage                                                                                      | $V_F$    | -    | 0.4  | V    |
| at $I_F = 1\text{ mA}$                                                                               |          | -    | 1    |      |
| Reverse Current                                                                                      | $I_R$    | -    | 600  | nA   |
| at $V_R = 15\text{ V}$                                                                               |          | -    | 600  |      |
| Terminal Capacitance                                                                                 | $C_T$    | 1.3  | -    | pF   |
| at $V_R = 1\text{ V}$ , $f = 1\text{ MHz}$                                                           |          | -    | -    |      |
| Reverse Recovery Time                                                                                | $t_{rr}$ | 1    | -    | ns   |
| Detection Efficiency                                                                                 | $\eta$   | 60   | -    | %    |
| at $V_{in} = 3 V_{(peak)}$ , $f = 30\text{ MHz}$ , $R_L = 3.9\text{ K}\Omega$ , $C_L = 10\text{ pF}$ |          |      |      |      |



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