## MA6X125 (MA125)

## Silicon epitaxial planar type

For switching circuit

## Features

- Four isolated elements contained in one package, allowing highdensity mounting

Absolute Maximum Ratings $\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C}$

| Parameter | Symbol | Rating | Unit |
| :--- | :---: | :---: | :---: |
| Reverse voltage | $\mathrm{V}_{\mathrm{R}}$ | 40 | V |
| Maximum peak reverse voltage | $\mathrm{V}_{\mathrm{RM}}$ | 40 | V |
| Forward current ${ }^{*}$ | $\mathrm{I}_{\mathrm{F}}$ | 100 | mA |
| Peak forward current ${ }^{*}$ | $\mathrm{I}_{\mathrm{FM}}$ | 200 | mA |
| Junction temperature | $\mathrm{T}_{\mathrm{j}}$ | 150 | ${ }^{\circ} \mathrm{C}$ |
| Storage temperature | $\mathrm{T}_{\mathrm{stg}}$ | -55 to +150 | ${ }^{\circ} \mathrm{C}$ |

Note) *: Value for single diode

Electrical Characteristics $\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C} \pm 3^{\circ} \mathrm{C}$


Marking Symbol: M21
Internal Connection


| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Forward voltage | $V_{F}$ | $\mathrm{I}_{\mathrm{F}}=100 \mathrm{~mA}$ |  |  | 1.2 | V |
| Reverse voltage | $\mathrm{V}_{\mathrm{R}}$ | $\mathrm{I}_{\mathrm{R}}=100 \mu \mathrm{~A}$ | 40 |  |  | V |
| Reverse current | $\mathrm{I}_{\mathrm{R}}$ | $\mathrm{V}_{\mathrm{R}}=40 \mathrm{~V}$ |  |  | 100 | nA |
| Terminal capacitance | $\mathrm{C}_{\mathrm{t}}$ | $\mathrm{V}_{\mathrm{R}}=0 \mathrm{~V}, \mathrm{f}=1 \mathrm{MHz}$ |  |  | 5.0 | pF |
| Reverse recovery time *3 | $\mathrm{t}_{\mathrm{rr} 1}{ }^{* 1}$ | $\begin{aligned} & \mathrm{I}_{\mathrm{F}}=10 \mathrm{~mA}, \mathrm{~V}_{\mathrm{R}}=6 \mathrm{~V} \\ & \mathrm{I}_{\mathrm{rf}}=0.1 \mathrm{I}_{\mathrm{R}}, \mathrm{R}_{\mathrm{L}}=100 \Omega \end{aligned}$ |  | 150 9 |  | ns |

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. Absolute frequency of input and output is 100 MHz .
3. *1: Between pins 1 and 6 , Between pins 3 and 5
*2: Between pins 2 and 6, Between pins 3 and 4
*3: $\mathrm{t}_{\mathrm{rr}}$ measurement circuit



$\mathrm{I}_{\mathrm{R}}-\mathrm{V}_{\mathrm{R}}$






$\mathrm{C}_{\mathrm{t}}-\mathrm{V}_{\mathrm{R}}$



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