## MA164

## Silicon epitaxial planer type

## For switching circuits

Features

- Independent incorporating of two elements, enabling high-density mounting
- MA153 type with reverse wiring (series connection)
- Absolute Maximum Ratings $\left(\mathrm{Ta}=25^{\circ} \mathrm{C}\right)$

| Parameter |  | Symbol | Rating | Unit |
| :---: | :---: | :---: | :---: | :---: |
| Reverse voltage (DC) |  | $\mathrm{V}_{\mathrm{R}}$ | 40 | V |
| Peak reverse voltage |  | $\mathrm{V}_{\mathrm{RM}}$ | 40 | V |
| Forward current (DC) | Single | $\mathrm{I}_{\mathrm{F}}$ | 100 | mA |
|  | Series |  | 65 |  |
| Peak forward current | Single | $\mathrm{I}_{\text {FM }}$ | 200 | mA |
|  | Series |  | 130 |  |
| Junction temperature |  | $\mathrm{T}_{\mathrm{j}}$ | 150 | ${ }^{\circ} \mathrm{C}$ |
| Storage temperature |  | $\mathrm{T}_{\text {stg }}$ | -55 to +150 | ${ }^{\circ} \mathrm{C}$ |



Marking Symbol : M2E


## Electrical Characteristics $\left(\mathrm{Ta}=25^{\circ} \mathrm{C}\right)$

| Parameter | Symbol | Condition | min | typ | max | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reverse current (DC) | $\mathrm{I}_{\mathrm{R}}$ | $\mathrm{V}_{\mathrm{R}}=40 \mathrm{~V}$ |  |  | 100 | nA |
| Forward voltage (DC) | $\mathrm{V}_{\mathrm{F}}$ | $\mathrm{IF}_{\mathrm{F}}=100 \mathrm{~mA}$ |  |  | 1.2 | V |
| Reverse voltage (DC) | $\mathrm{V}_{\mathrm{R}}$ | $\mathrm{I}_{\mathrm{R}}=100 \mu \mathrm{~A}$ | 40 |  |  | V |
| Terminal capacitance | $\mathrm{C}_{\mathrm{t}}$ | $\mathrm{V}_{\mathrm{R}}=0 \mathrm{~V}, \mathrm{f}=1 \mathrm{MHz}$ |  |  | 5 | pF |
| Reverse recovery time | $\mathrm{t}_{\mathrm{rr1}} \mathrm{t}_{\mathrm{rr2}} * 1.3$ | $\begin{aligned} & \mathrm{I}_{\mathrm{F}}=10 \mathrm{~mA}, \mathrm{~V}_{\mathrm{R}}=6 \mathrm{~V} \\ & \mathrm{I}_{\mathrm{rr}}=0.1 \cdot \mathrm{I}_{\mathrm{R}}, \mathrm{R}_{\mathrm{L}}=100 \Omega \end{aligned}$ |  | 150 9 |  | ns |

Note 1: Rated input/output frequency: 100 MHz
$2:{ }^{* 1}$ Between pins 1 and 3
*2 Between pins 2 and 3
*3 $\mathrm{t}_{\text {rr }}$ measuring circuit
Marking


Output Pulse


M2E



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


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

$\mathrm{I}_{\mathrm{F}}-\mathrm{Ta}$

$\mathrm{I}_{\mathrm{F} \text { (surge) }}-\mathrm{t}_{\mathrm{W}}$




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