## Applications

- High frequency rectification (switching regulators, converters, choppers).


## Features

- Low forward voltage ( $\mathrm{IF}=0.3 \mathrm{~A}, \mathrm{VF}_{\mathrm{F}} \max =0.32 \mathrm{~V}$ ) $\left(\mathrm{IF}=0.5 \mathrm{~A}, \mathrm{VF}_{\mathrm{F}} \max =0.35 \mathrm{~V}\right)$.
- Ultrasmall package permitting applied sets to be small and slim (mounting height 0.85 mm ).


## Specifications

Absolute Maximum Ratings at $\mathrm{Ta}=25^{\circ} \mathrm{C}$

| Parameter | Symbol | Conditions | Ratings | Unit |
| :--- | :---: | :---: | :---: | :---: |
| Repetitive Peak Reverse Voltage | VRRM |  | 15 | V |
| Nonrepetitive Peak Reverse Surge Voltage | V $_{\text {RSM }}$ |  | 15 | V |
| Average Output Current | IO |  | 1 | A |
| Surge Forward Current | $\mathrm{IFSM}_{\mathrm{FS}}$ | 50 Hz sine wave, 1 cycle | 10 | A |
| Junction Temperature | Tj |  | -55 to +125 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature | Tstg |  | -55 to +125 | ${ }^{\circ} \mathrm{C}$ |

Electrical Characteristics at $\mathrm{Ta}=25^{\circ} \mathrm{C}$

| Parameter | Symbol | Conditions | Ratings |  |  | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | min | typ | max |  |
| Reverse Voltage | $\mathrm{V}_{\mathrm{R}}$ | $\mathrm{I}_{\mathrm{R}}=0.5 \mathrm{~mA}$ | 15 |  |  | V |
| Forward Voltage | VF1 | $\mathrm{IF}=0.3 \mathrm{~A}$ |  | 0.30 | 0.32 | V |
|  | VF2 | $\mathrm{I}_{\mathrm{F}}=0.5 \mathrm{~A}$ |  | 0.32 | 0.35 | V |
| Reverse Current | IR | $\mathrm{V}_{\mathrm{R}}=6 \mathrm{~V}$ |  |  | 90 | $\mu \mathrm{A}$ |
| Interterminal Capacitance | C | $\mathrm{V}=10 \mathrm{~V}, \mathrm{f}=1 \mathrm{MHz}$ |  | 20 |  | pF |
| Reverse Recovery Time | trr | $\mathrm{I}_{\mathrm{F}}=\mathrm{I}_{\mathrm{R}}=100 \mathrm{~mA}$, See specified Test Circuit. |  |  | 10 | ns |
| Thermal Resistance | Rth(j-a) | Mounted on a ceramic board ( $600 \mathrm{~mm}^{2} \times 0.8 \mathrm{~mm}$ ) |  | 138 |  | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |

Marking : SF

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## Package Dimensions

unit : mm
1305A


## trr Test Circuit



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