## MA729WS

SILICON EPITAXIAL SCHOTTKY BARRIER DIODE

## Applications

- Super-high speed switching circuit
- Small current rectification

PINNING

| PIN | DESCRIPTION |
| :---: | :--- |
| 1 | Cathode |
| 2 | Anode |



Top View
Marking Code: "SZ"
Simplified outline SOD-323 and symbol

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

| Parameter | Symbol | Value | Unit |
| :--- | :---: | :---: | :---: |
| Repetitive Peak Reverse Voltage | $\mathrm{V}_{\text {RRM }}$ | 30 | V |
| Reverse Voltage | $\mathrm{V}_{\mathrm{R}}$ | 30 | V |
| Average Forward Current | $\mathrm{I}_{\mathrm{O}}$ | 200 | mA |
| Maximum (Peak) Forward Current | $\mathrm{I}_{\mathrm{FM}}$ | 300 | mA |
| Non-repetitive Peak Forward Surge Current ${ }^{1)}$ | $\mathrm{I}_{\text {FSM }}$ | 1 | A |
| Junction Temperature | $\mathrm{T}_{J}$ | 150 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T}_{\mathrm{s}}$ | -55 to +150 | ${ }^{\circ} \mathrm{C}$ |

${ }^{1)}$ The peak-to-peak value in one cycle of 50 Hz sine-wave (non-repetitive)

Characteristics at $\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C}$

| Parameter | Symbol | Typ. | Max. | Unit |
| :--- | :---: | :---: | :---: | :---: |
| Forward Voltage <br> at $\mathrm{I}_{\mathrm{F}}=200 \mathrm{~mA}$ | $\mathrm{~V}_{\mathrm{F}}$ | - | 0.55 | V |
| Reverse Current <br> at $\mathrm{V}_{\mathrm{R}}=30 \mathrm{~V}$ | $\mathrm{I}_{\mathrm{R}}$ | - | 50 | $\mu \mathrm{~A}$ |
| Terminal Capacitance <br> at $\mathrm{f}=1 \mathrm{MHz}$ | $\mathrm{C}_{\mathrm{T}}$ | 30 | - | pF |
| Reverse Recovery Time <br> at $\mathrm{I}_{\mathrm{F}}=\mathrm{I}_{\mathrm{R}}=100 \mathrm{~mA}, \mathrm{I}_{\mathrm{rr}}=10 \mathrm{~mA}, \mathrm{R}_{\mathrm{L}}=100 \Omega$ | $\mathrm{t}_{\mathrm{rr}}$ | 3 | - | ns |







SEMTECH ELECTRONICS LTD.
(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)

## PACKAGE OUTLINE



| UNIT | A | $\mathrm{b}_{\mathrm{p}}$ | C | D | E | $\mathrm{H}_{\mathrm{E}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| mm | 1.10 | 0.40 | 0.15 | 1.80 | 1.35 | 2.80 |
|  | 0.80 | 0.25 | 0.00 | 1.60 | 1.15 | 2.30 |

