## SS22A THRU SS210A

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

## Reverse Voltage - 20 to 100 V

Forward Current - 2 A

## Features

- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- The plastic package carries Underwriters Laboratory flammability Classification 94V-0
- High forward surge current capability
- Built-in strain relief, ideal for automated placement


## Mechanical Data

- Case: SMA (DO-214AC) molded plastic body
- Terminals: Leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any


Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Ratings at $25^{\circ} \mathrm{C}$ ambient temperature unless otherwise specified. Single phase, half wave 60 Hz , resistive or inductive load, For capacitive load current derate by $20 \%$.

| Parameter | Symbol | SS22A | SS23A | SS24A | SS25A | SS26A | SS28A | SS210A | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum Repetitive Peak Reverse Voltage | VRRM | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Maximum RMS Voltage | $\mathrm{V}_{\text {RMS }}$ | 14 | 21 | 28 | 35 | 42 | 56 | 70 | V |
| Maximum DC Blocking Voltage | $V_{D C}$ | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Maximum Average Forward Rectified Current | $\mathrm{I}_{\text {(AV) }}$ | 2 |  |  |  |  |  |  | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | IFSM | 50 |  |  |  |  |  |  | A |
| Maximum Instantaneous Forward Voltage at 2 A | $V_{F}$ | 0.55 |  |  | 0.75 |  | 0.85 |  | V |
| Maximum DC Reverse Current at $\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C}$ | $\mathrm{I}_{\mathrm{R}}$ | 0.5 |  |  |  |  |  |  | mA |
| Rated DC Blocking Voltage $\quad \mathrm{T}_{\mathrm{a}}=100^{\circ} \mathrm{C}$ |  | 20 |  |  | 10 |  |  |  |  |
| Typical Junction Capacitance ${ }^{1)}$ | $\mathrm{C}_{\mathrm{j}}$ | 220 |  |  | 180 |  |  |  | pF |
| Typical Thermal Resistance ${ }^{2)}$ | $\mathrm{R}_{\text {өJA }}$ | 75 |  |  |  |  |  |  | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |
| Operating Junction Temperature Range | $\mathrm{T}_{\mathrm{j}}$ | -65 to +125 |  |  | -65 to +150 |  |  |  | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T}_{\text {stg }}$ | - 65 to +150 |  |  |  |  |  |  | ${ }^{\circ} \mathrm{C}$ |

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FIG. 4-TYPICAL REVERSE CHARACTERISTICS




[^0]:    ${ }^{1)}$ Measured at 1 MHz and applied reverse voltage of 4 V DC .
    ${ }^{2)}$ P.C.B mounted with $0.2 \times 0.2$ " $(5 \times 5 \mathrm{~mm})$ copper pad areas.

