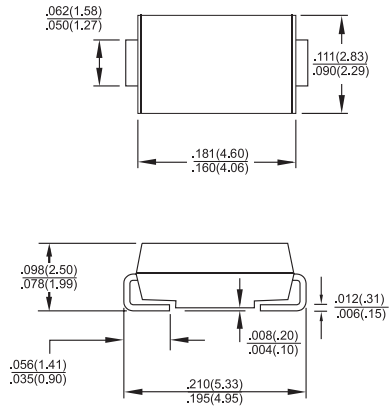
# THE DATASHEET OF

# SS32

# Surface Mount Schottky Rectifiers

## SMA/DO-214AC




Dimensions in inches and (millimeters)

## Features

- ✧ For surface mounted application
- ✧ Easy pick and place
- ✧ Metal to silicon rectifier, majority carrier conduction
- ✧ Low power loss, high efficiency
- ✧ High current capability, low VF
- ✧ High surge current capability
- ✧ Plastic material used carriers Underwriters Laboratory Classification 94V-0
- ✧ Epitaxial construction
- ✧ High temperature soldering: 260°C / 10 seconds at terminals

## Mechanical Data

- ✧ Case: JEDEC DO-214AC Molded plastic
- ✧ Terminals: Pure tin plated, lead free
- ✧ Polarity: Indicated by cathode band
- ✧ Packaging: 16mm tape per EIA STD RS-481

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

| Type Number | Symbol | SS 32 | SS 33 | SS 34 | SS 35 | SS 36 | SS 39 | SS 310 | Units |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 20 | 30 | 40 | 50 | 60 | 90 | 100 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 14 | 21 | 28 | 35 | 42 | 63 | 70 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 20 | 30 | 40 | 50 | 60 | 90 | 100 | V |
| Maximum Average Forward Rectified Current at $T_L$(See Fig. 1) | $I_{(AV)}$ | 3.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method ) | $I_{FSM}$ | 100 | | | 70 | | | | A |
| Maximum Instantaneous Forward Voltage (Note 1) IF= 3.0A @ 25°C<br>@ 100°C | $V_F$ | 0.5<br>0.4 | | | 0.75<br>0.65 | | 0.85<br>0.70 | | V |
| Maximum DC Reverse Current @ $T_A$ =25°C at | $I_R$ | 0.5 | | | | | 0.1 | | mA |
| Rated DC Blocking Voltage @ $T_A$=125°C | | 10 | | | 5 | | 0.5 | | mA |
| Typical Thermal Resistance ( Note 2 ) | $R_{\theta JL}$<br>$R_{\theta JA}$ | 17<br>55 | | | | | | | °C/W |
| Operating Temperature Range | $T_J$ | -55 to +125 | | | -55 to +150 | | | | °C |
| Storage Temperature Range | $T_{STG}$ | -55 to +150 | | | | | | | °C |

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

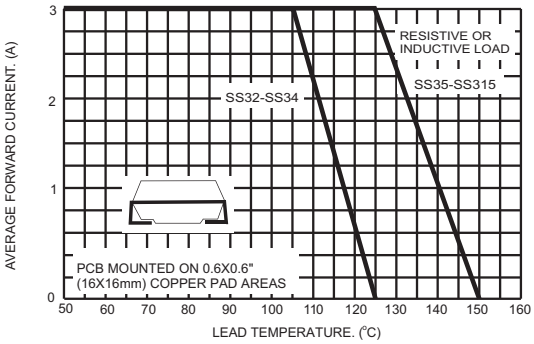



FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

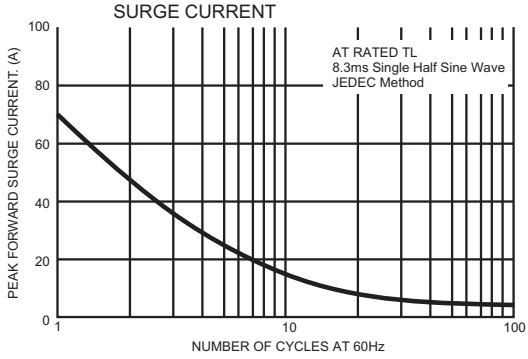



FIG.3- TYPICAL FORWARD CHARACTERISTICS

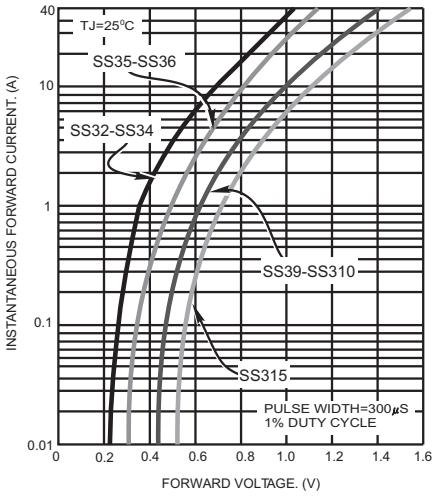



FIG.4- TYPICAL REVERSE CHARACTERISTICS

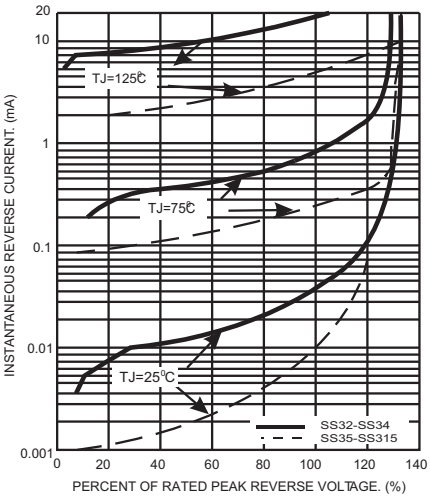



FIG.5- TYPICAL JUNCTION CAPACITANCE

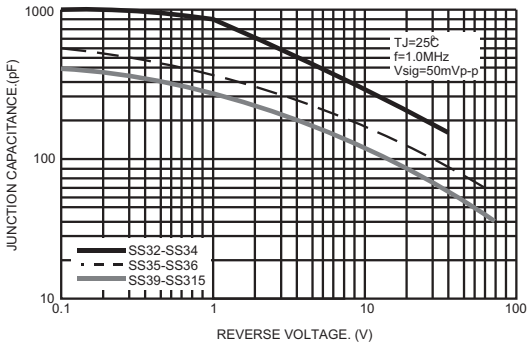
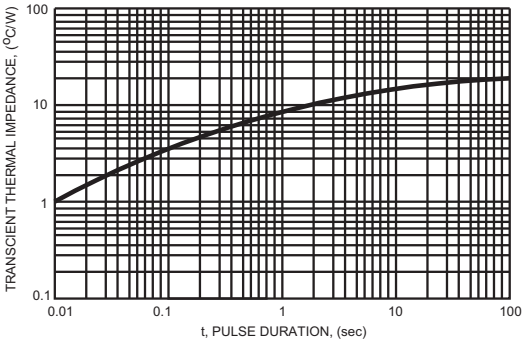



FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- View SS32 on WIN SOURCE
- ShenZhen SlkorMicro Semicon Co. Ltd Information

## Optimize Your Supply Chain with WIN SOURCE Solutions

- Global Sourcing Solution
- Obsolete Management
- Cost Control Management
- Shortage Management
- Alternative Solution
- Excess Inventory Management