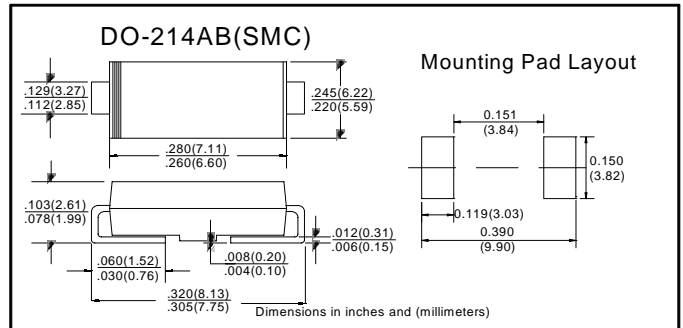


## Schottky Rectifier

### ■ Features

- $I_o$  3.0A
- $V_{RRM}$  20V-200V
- High surge current capability
- ◇ UL Recognized File # E-326243
- ◇ For surface mounted application
- ◇ Metal to silicon rectifier, majority carrier conduction
- ◇ Low forward voltage drop
- ◇ Easy pick and place
- ◇ High surge current capability
- ◇ Plastic material used carriers Underwriters Laboratory Classification 94V-0
- ◇ Epitaxial construction
- ◇ High temperature soldering : 260°C/10 seconds at terminals
- ◇ AEC-Q101 qualified

### ■ Outline Dimensions and Mark



### ■ Applications

- Rectifier

### ■ Mechanical Data

- ◇ Case: Molded plastic
- ◇ Terminals: Pure tin plated, lead free
- ◇ Polarity: Indicated by cathode band
- ◇ Packaging: 16mm tape per EIA Std RS-481
- ◇ Weight: 0.21 gram

### ■ 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 | SS 315 | SS 320 | Unit |
|--|-----------------|---------------|-------|-------|-------|-------|-------|--------|--------|--------|------|
| Maximum Repetitive Peak Reverse Voltage  | $V_{RRM}$       | 20            | 30    | 40    | 50    | 60    | 90    | 100    | 150    | 200    | V    |
| Maximum RMS Voltage  | $V_{RMS}$       | 14            | 21    | 28    | 35    | 42    | 63    | 70     | 105    | 140    | V    |
| Maximum DC Blocking Voltage  | $V_{DC}$        | 20            | 30    | 40    | 50    | 60    | 90    | 100    | 150    | 200    | V    |
| Maximum Average Forward Rectified Current  | $I_{F(AV)}$     | 3             |       |       |       |       |       |        |        |        | 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) @ 3 A   | $V_F$           | 0.50          |       |       | 0.75  |       | 0.85  |        | 0.95   |        | V    |
| Maximum Reverse Current @ Rated VR<br>$T_A=25^\circ\text{C}$<br>$T_A=100^\circ\text{C}$<br>$T_A=125^\circ\text{C}$ | $I_R$           | 0.5           |       |       |       |       | 0.3   |        |        |        | mA   |
|  |                 | 20            |       |       | 10    |       | -     |        |        |        |      |
|  |                 | -             |       |       |       |       | 5     |        |        |        |      |
| Typical Thermal Resistance   | $R_{\theta JL}$ | 17            |       |       |       |       |       |        |        |        | °C/W |
|  | $R_{\theta JA}$ | 55            |       |       |       |       |       |        |        |        |      |
| Operating Temperature Range  | $T_J$           | - 55 to + 150 |       |       |       |       |       |        |        |        | °C   |
| Storage Temperature Range  | $T_{STG}$       | - 55 to + 150 |       |       |       |       |       |        |        |        | °C   |

Note 1: Pluse Test with PW=300 usec, 1% Duty Cycle



# SS32 ~ SS320

## Characteristics(Typical) (TA=25°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

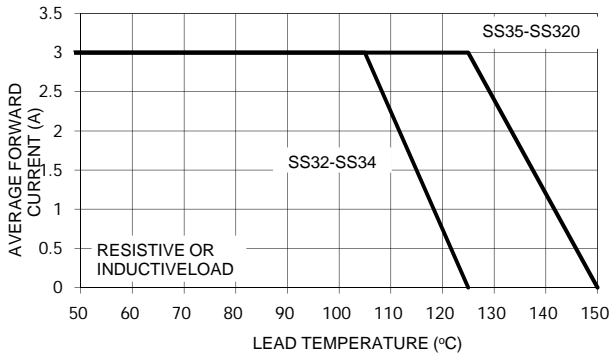


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

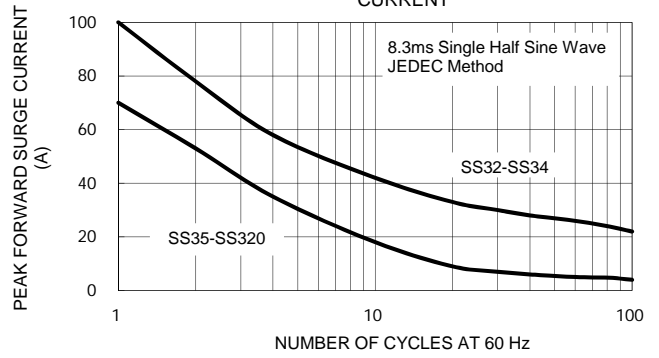


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

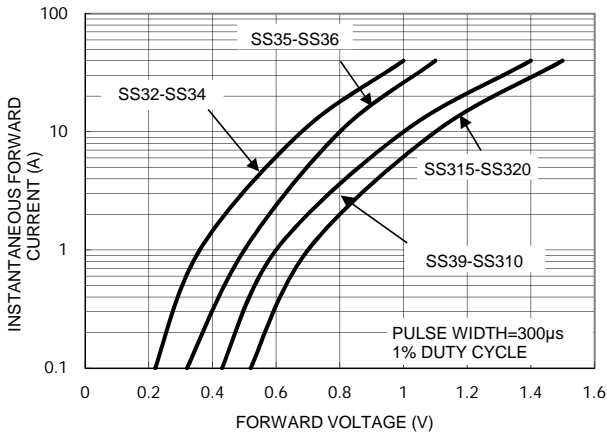


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

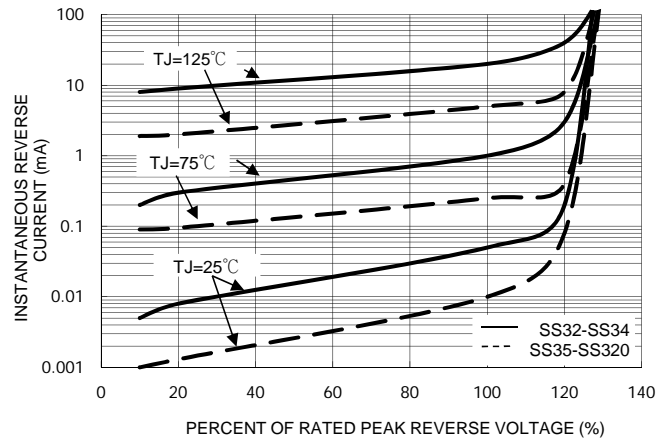


FIG. 5 TYPICAL JUNCTION CAPACITANCE

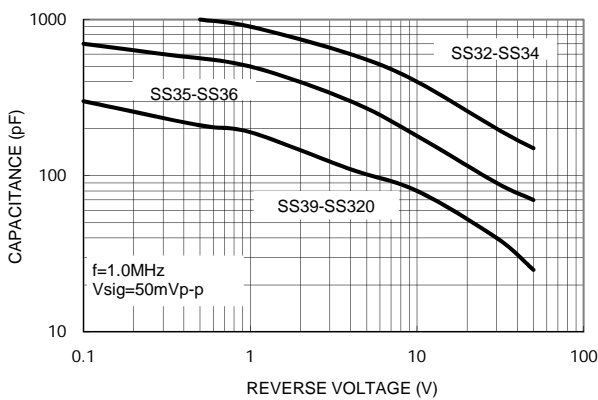


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

