

SCHOTTKY DIODES

FEATURES

Plastic package has Underwriters Laboratory

Flammability Classification 94V-0

For surface mounted applications

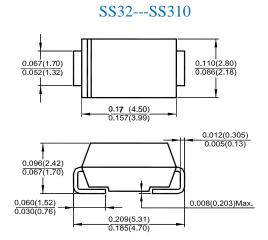
Metal silicon junction, majority carrier conduction

Low power loss, high efficiency.

High current capability, low forward voltage drop

MECHANICAL DATA

SMA (DO-214AC) molded plastic body leads solderable per MIL-STD-750, Method 2026 color band denotes cathode end



Dimensions in inches and (millimeters)
DO-214AC (SMA)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.

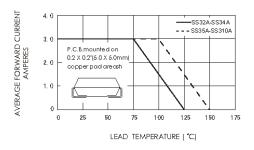
| Paramete | Symbols | SS32 | SS33 | SS34 | SS35 | SS36 | SS38 | SS310 | Unit |
|---|------------------|---------------|---------------|------|------|------|------|-------|------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Maximum RMS Voltage | V _{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | V |
| Maximum DC Blocking Voltage | v_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Maximum Average Forward Rectified Current | I(AV) | 3 | | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load | IFSM | 80 | | | | | | A | |
| Maximum Instantaneous Forward Voltage at 3 A | VF | 0.55 | | | | 0.75 | | | V |
| Maximum DC Reverse Current $T_A = 25$ °C at Rated DC Blocking Voltage $T_A = 100$ °C | I _R | 0.2 | | | | | mA | | |
| Typical Thermal Resistance ¹⁾ | R JA R JL | | 88 28 | | | | | | °C/W |
| Operating Junction Temperature Range | Tj | - 6 | - 65 to + 125 | | | | °C | | |
| Storage Temperature Range | T _{stg} | - 65 to + 150 | | | | | | | °C |

¹⁾P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.

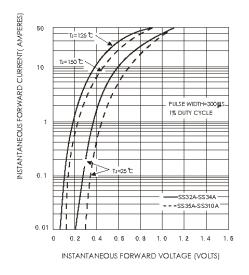


SS32---SS310 Typical Characteristics

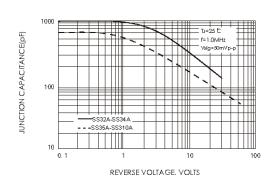
FORWARD CURRENT DERATING CURVE



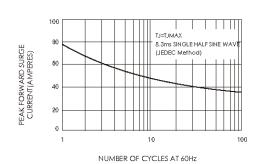
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



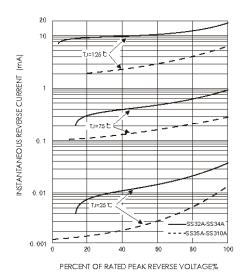
TYPICAL JUNCTION CAPACITANCE



MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL REVERSE CHARACTERISTICS



TYPICAL TRANSIENT THERMAL IMPEDANCE

