

Surface Mount Schottky Rectifiers

Major Ratings and Characteristics

$I_{F(AV)}$	3.0 A
V_{RRM}	20 V to 200 V
I_{FSM}	70A,100 A
V_F	0.55V,0.7V,0.85V,0.95V
$T_j \text{ max.}$	150 °C

SMA/DO-214AC

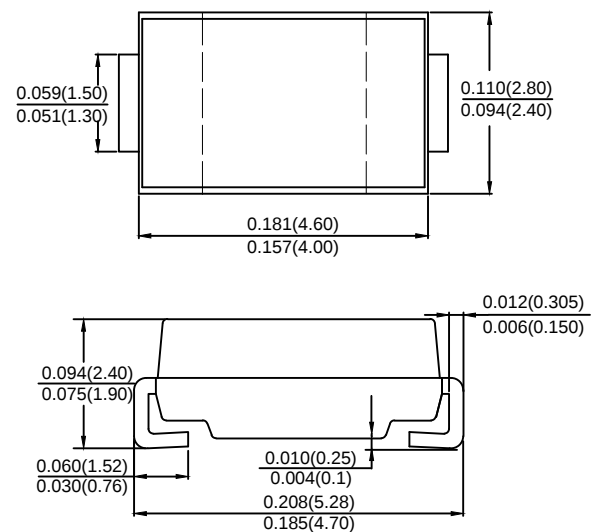


Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering:
260°C/10 seconds at terminals
- Component in accordance to
RoHS 2011/65/EU

Mechanical Data

- **Case:** JEDEC DO-214AC (SMA) molded plastic
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Laser band denotes cathode end



Dimensions in inches and (millimeters)

Type Number	Symbol	SS32	SS34	SS36	SS38	SS310	SS315	SS320	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	40	60	80	100	150	200	V
Maximum RMS Voltage	V _{RMS}	14	28	42	56	70	105	130	V
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current	I _{F(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) @ 3.0A T _A =25°C T _A =100°C	V _F	0.55 0.4		0.70 0.65	0.85 0.70		0.95 0.80		V
Maximum Reverse Current @ Rated VR T _A =25°C T _A =100°C T _A =125°C	I _R	0.5				0.1			mA
		10		5		-			
		-				0.5			
Typical Thermal Resistance	R _{θJL} R _{θJA}	17 55							°C/W
Operating Temperature Range	T _J	- 55 to + 125			- 55 to + 150				°C
Storage Temperature Range	T _{STG}	- 55 to + 150							°C

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

Surface Mount Schottky Rectifiers

Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

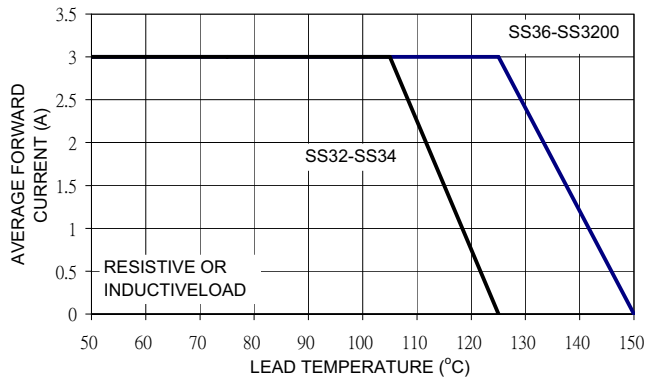


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

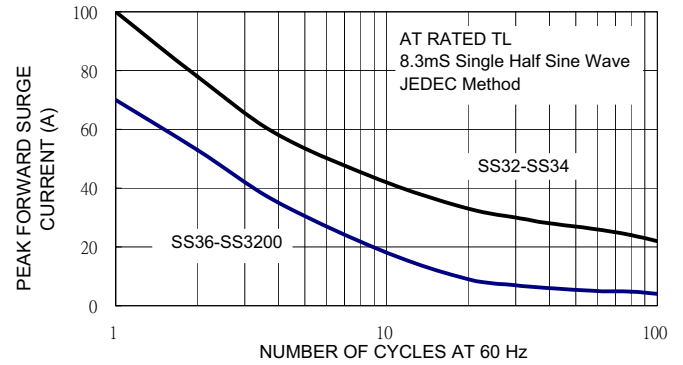


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

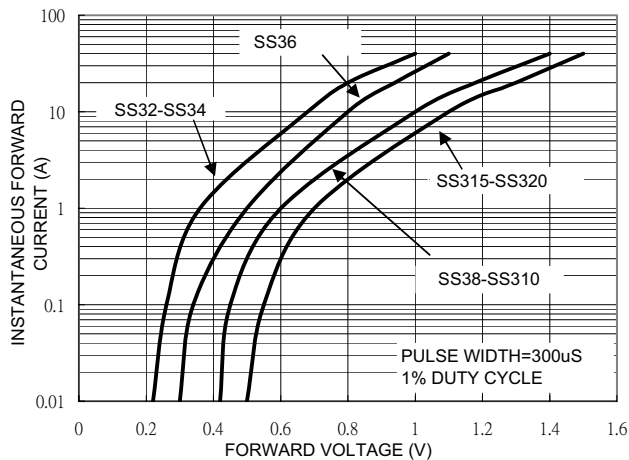


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

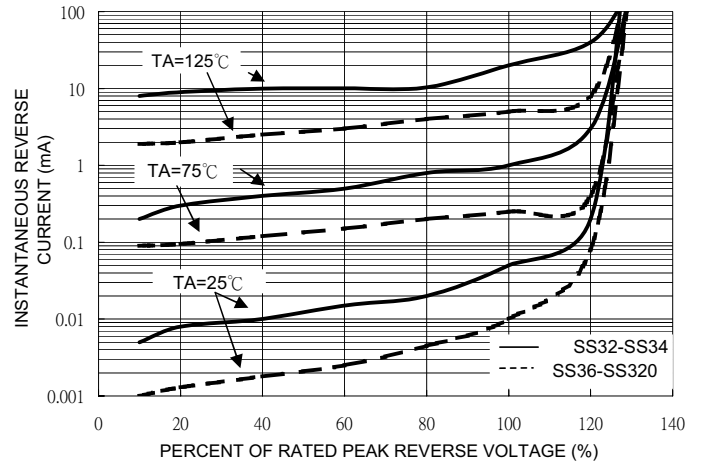


FIG. 5 TYPICAL JUNCTION CAPACITANCE

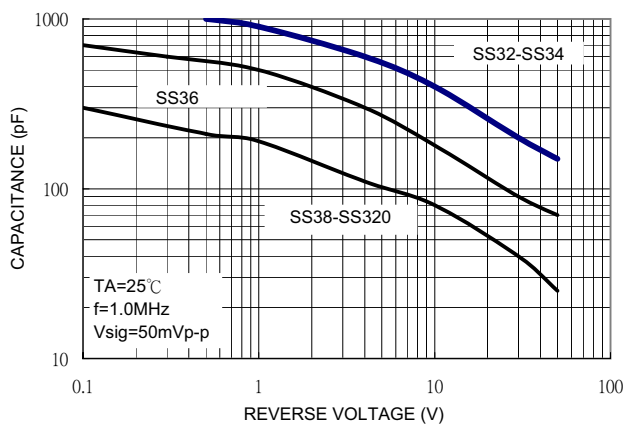


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

