



SS32~SS320

Surface Mount Schottky Rectifiers

Major Ratings and Characteristics

$I_{F(AV)}$	3.0 A
V_{RRM}	20 V to 200 V
I_{FSM}	100 A
V_F	0.55 V , 0.70 V , 0.85V
$T_j \text{ max.}$	150 °C

Features

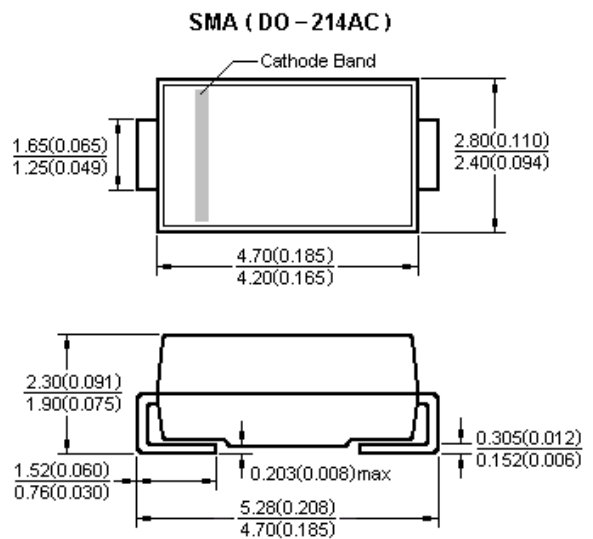
- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering:
260°C/10 seconds at terminals
- Component in accordance to
RoHS 2002/95/1 and WEEE 2002/96/EC

Mechanical Data

- Case: JEDEC DO-214AB molded plastic body over passivated chip
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Laser band denotes cathode end



SMA (DO-214AC)



Dimensions in millimeters and (inches)

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)}	3.0									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	0.5 0.4			0.75 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





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

FIG. 1 FORWARD CURRENT DERATING CURVE

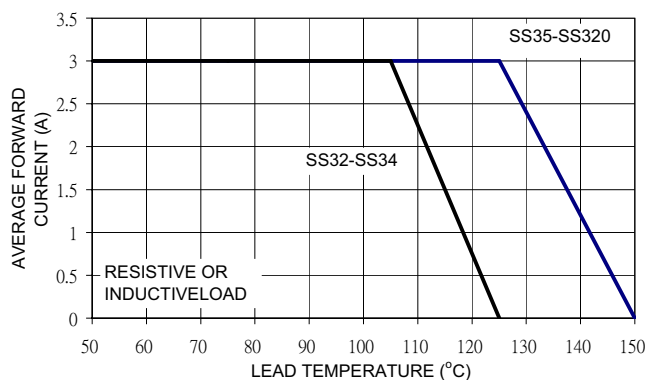


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

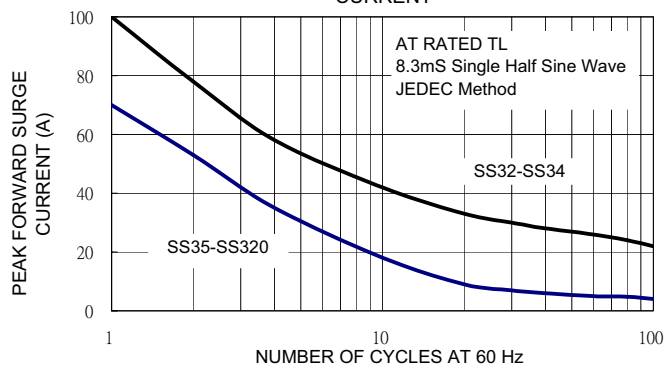


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

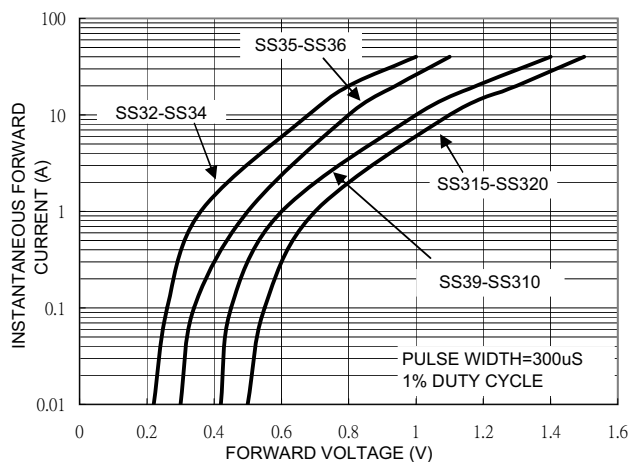


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

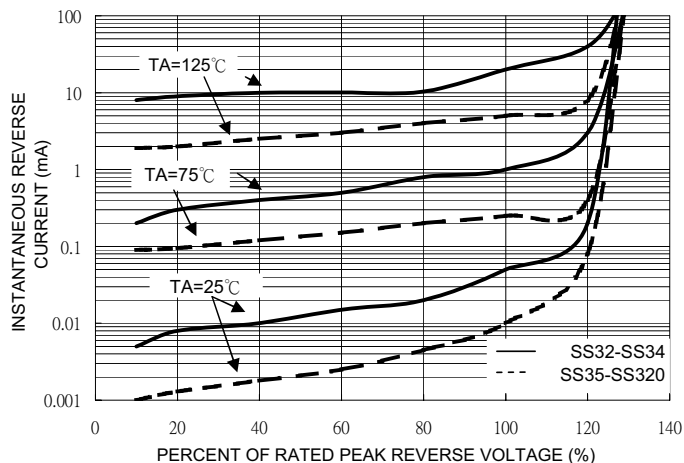


FIG. 5 TYPICAL JUNCTION CAPACITANCE

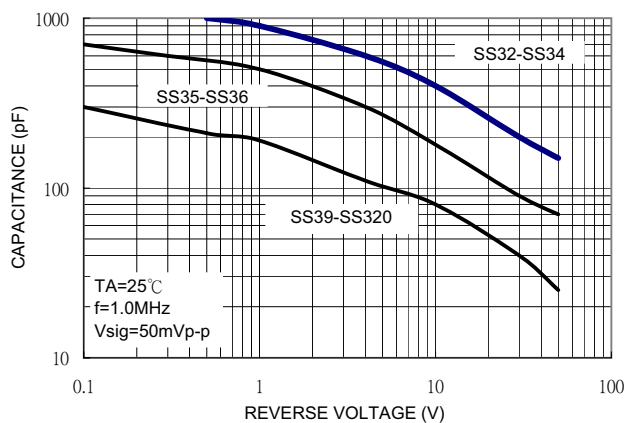


FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE

