

# SS32A THRU SS310A-HAF

## Surface Mount Schottky Barrier Rectifiers

Reverse Voltage - 20 to 100 V

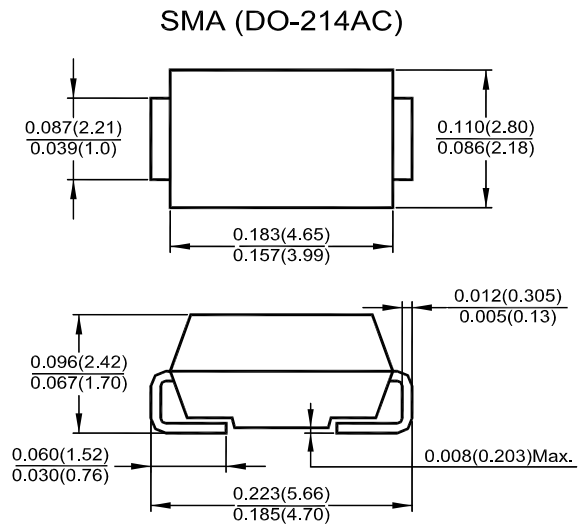
Forward Current - 3 A

### 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
- Halogen and Antimony Free(HAF), RoHS compliant

### Mechanical Data

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



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	SS32A	SS33A	SS34A	SS35A	SS36A	SS38A	SS310A	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	$I_{F(AV)}$	3							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	100							A
Maximum Instantaneous Forward Voltage at 3 A	$V_F$	0.55		0.7		0.85		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	$I_R$					0.5 20		mA	
Typical Thermal Resistance <sup>1)</sup>	$R_{\theta JA}$ $R_{\theta JL}$					55 17		$^\circ\text{C/W}$	
Operating Junction Temperature Range	$T_j$	- 55 to + 125							$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150							$^\circ\text{C}$

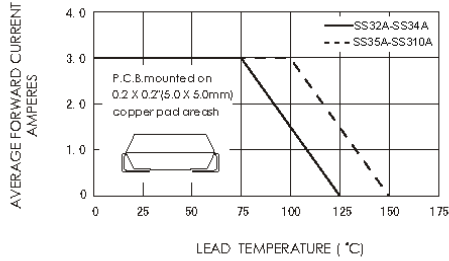
<sup>1)</sup> P.C.B. mounted with 0.55 X 0.55 " (14 X 14 mm) copper pad areas.

**TOP DYNAMIC**

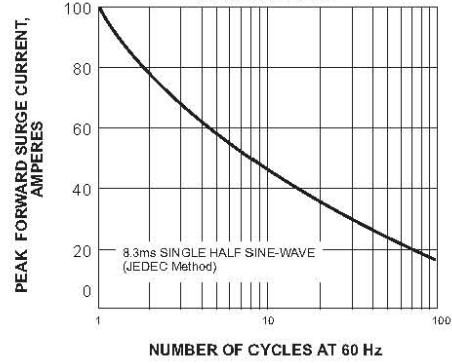


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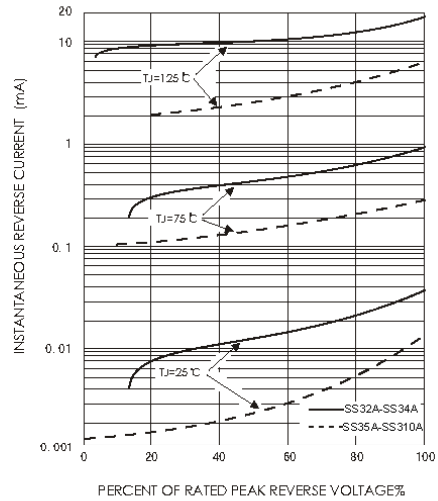
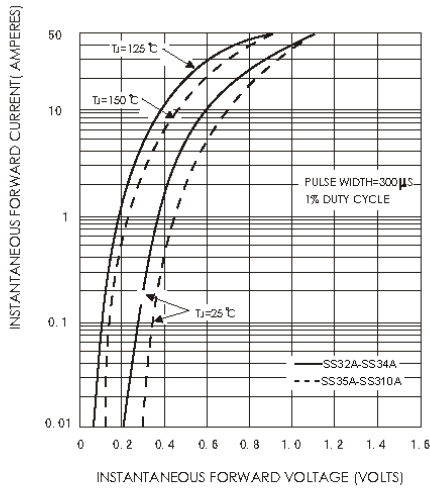
FORWARD CURRENT DERATING CURVE



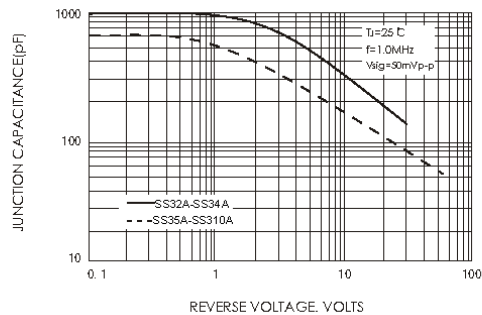
MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



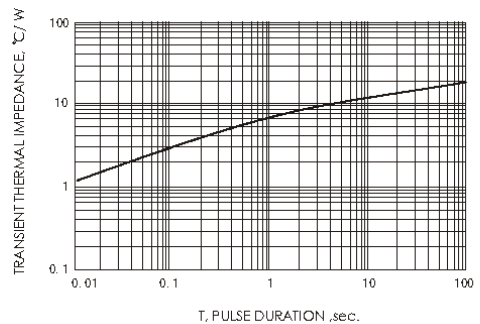
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



TYPICAL JUNCTION CAPACITANCE



TYPICAL TRANSIENT THERMAL IMPEDANCE



**TOP DYNAMIC**

