

SS32AD THRU SS310AD

Surface Mount Schottky Barrier Rectifiers

Reverse Voltage - 20 to 100 V

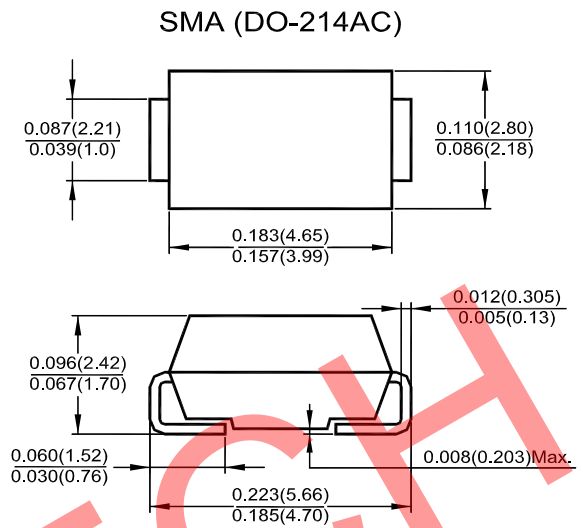
Forward Current - 3 A

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

Mechanical Data

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



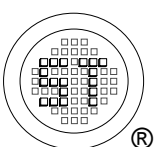
Dimensions in inches and (millimeters)

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	SS32AD	SS33AD	SS34AD	SS35AD	SS36AD	SS38AD	SS310AD	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 $T_a = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100^\circ\text{C}$	I_R	0.5 20							mA
Typical Thermal Resistance ¹⁾	$R_{\theta JA}$ $R_{\theta JL}$	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							$^\circ\text{C}$

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

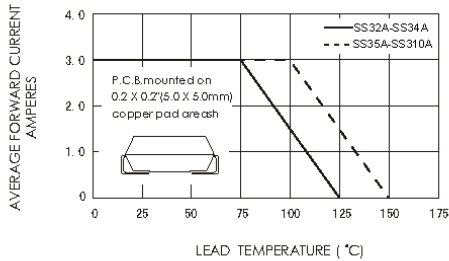


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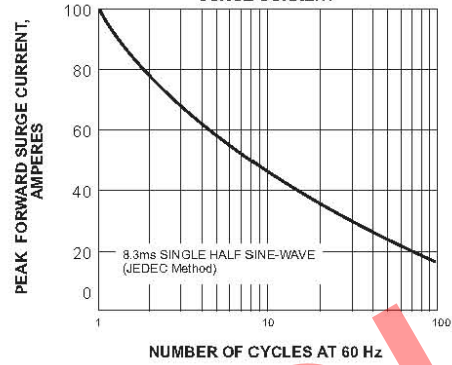


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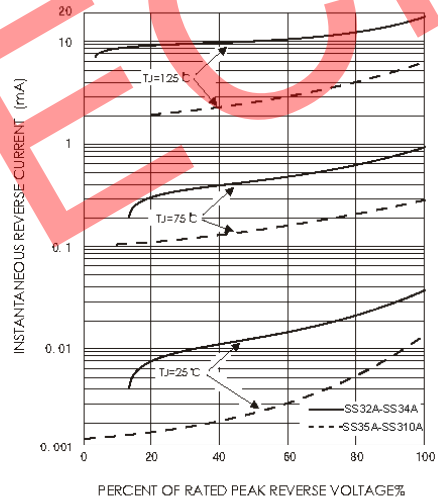
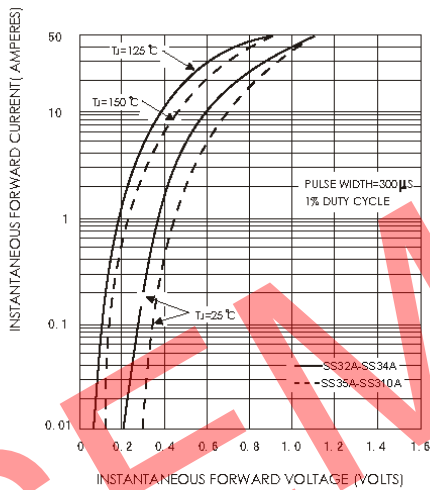
FORWARD CURRENT DERATING CURVE



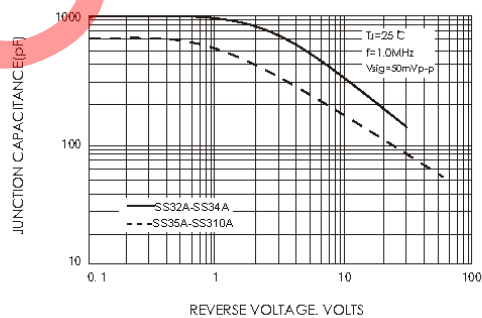
MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



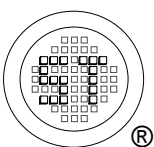
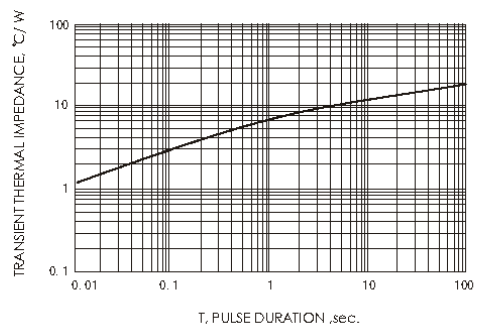
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



TYPICAL JUNCTION CAPACITANCE



TYPICAL TRANSIENT THERMAL IMPEDANCE



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