

Surface Mount Schottky Barrier Rectifiers

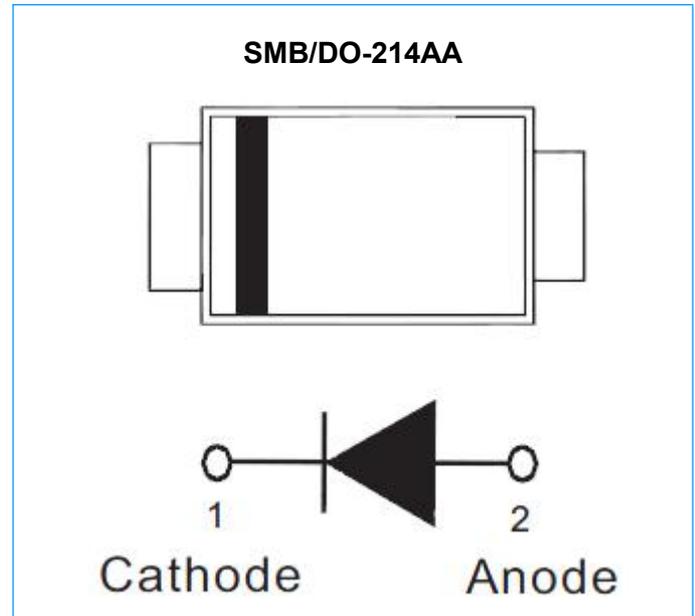
SS32B~SS320B
20 to 200 V
3A
SMB/DO-214AA

Features

- ◆ Plastic package has Underwriters Laboratory. Flammability Classification 94V-0.
- ◆ For surface mounted applications in order to optimize board space.
- ◆ Low power loss, High efficiency.
- ◆ High surge capacity.
- ◆ Lead free in compliance with EU RoHS 2.0.
- ◆ Green molding compound as per IEC 61249 standard.

Mechanical Date

- ◆ Case: JEDEC DO-214AA molded plastic.
- ◆ Terminals: Solder plated, solderable per MIL-STD-750, Method 2026.
- ◆ Polarity: Color band denotes cathode end.
- ◆ Standard packaging: 12mm tape (EIA-481).
- ◆ Approx. Weight: 0.0032 ounces, 0.092 grams.



Electrical and Thermal Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

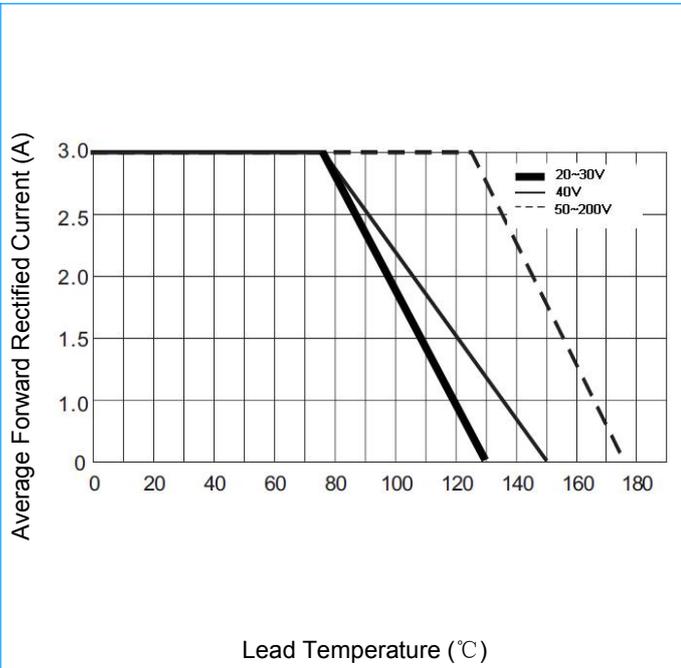
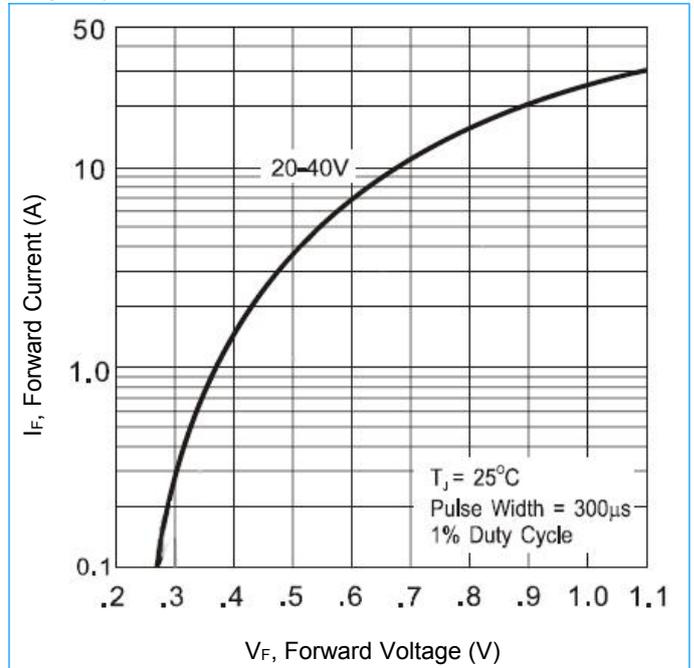
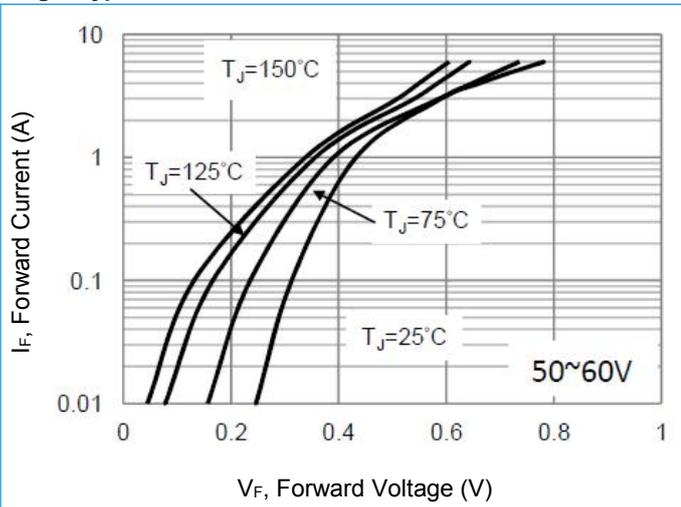
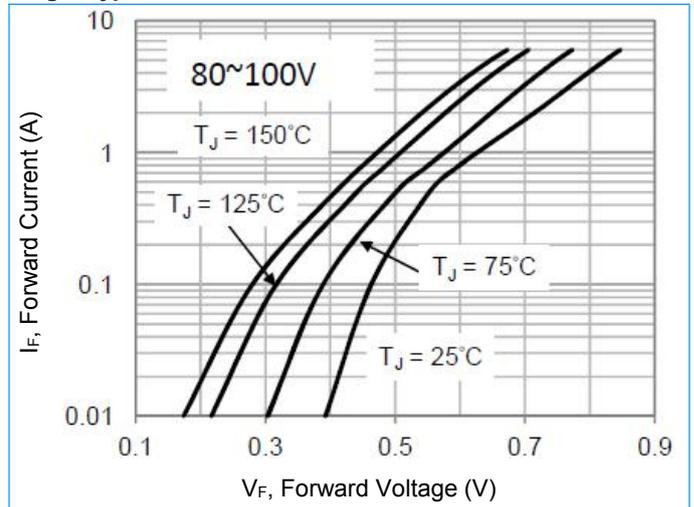
Parameter	Symbol	SS32B	SS33B	SS34B	SS35B	SS36B	SS38B	SS310B	SS315B	SS320B	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Current	$I_{F(AV)}$	3									A
Peak Forward Surge Current : 8.3ms Single Half Sinewave Superimposed on Rated Load	I_{FSM}	80									A
Maximum Forward Voltage at 3A (Note 1)	V_F	0.5			0.74		0.8		0.9		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_J=25^\circ\text{C}$	0.2			0.05						mA
	$T_J=100^\circ\text{C}$	20				10					
Typical Thermal Resistance	(Note 2)	$R_{\theta JA}$									$^\circ\text{C/W}$
	(Note 3)	$R_{\theta JL}$									
Operating Junction and Storage Temperature Range	$T_J,$ T_{STG}	-55 to +125		-55 to +150		-65 to +175					$^\circ\text{C}$

- Notes:**
1. Pulse Test with $PW=300\mu\text{sec}$, 2% Duty Cycle.
 2. Mounted on a FR4 PCB, single-sided copper, mini pad.
 3. Mounted on a FR4 PCB, single-sided copper, with 100cm^2 copper pad area.

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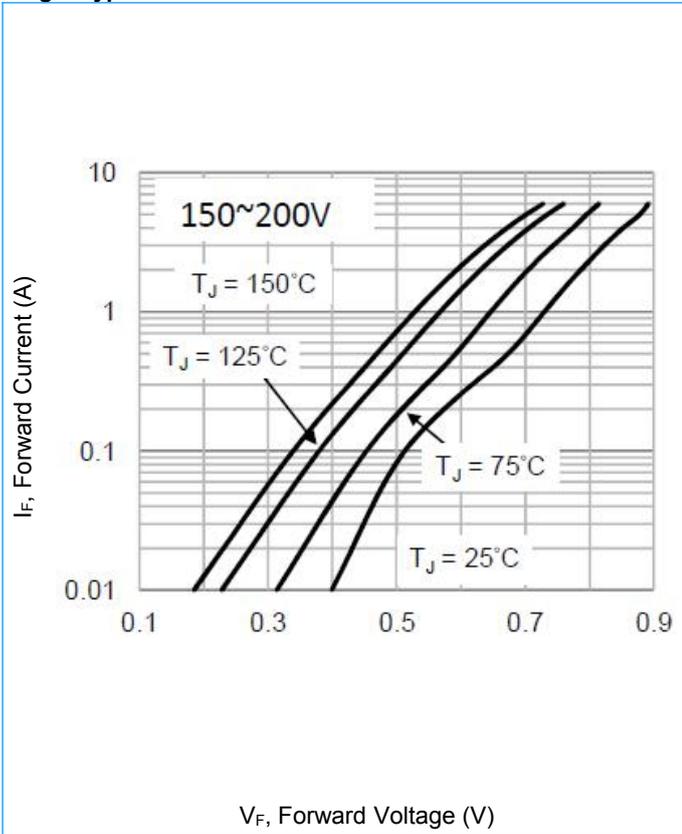
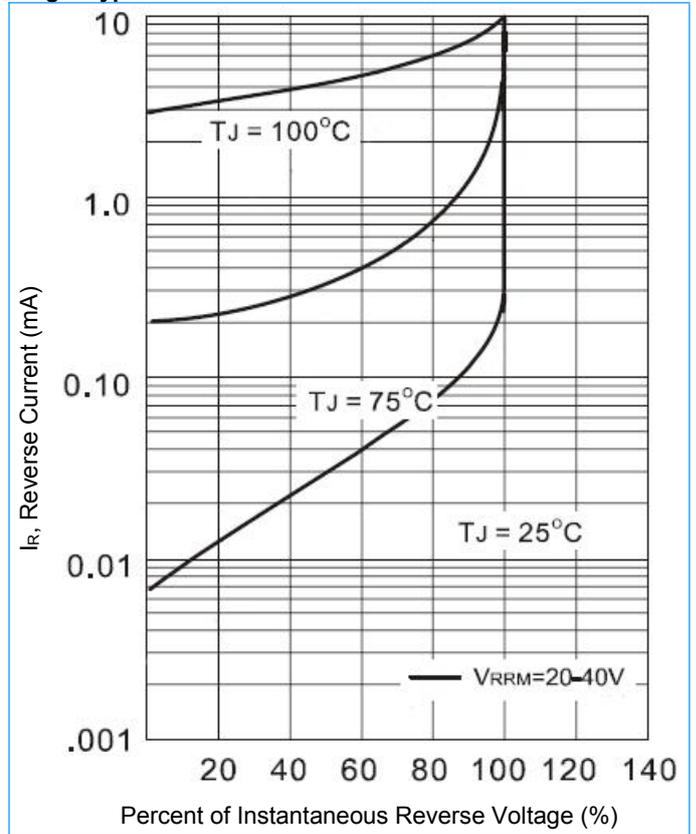
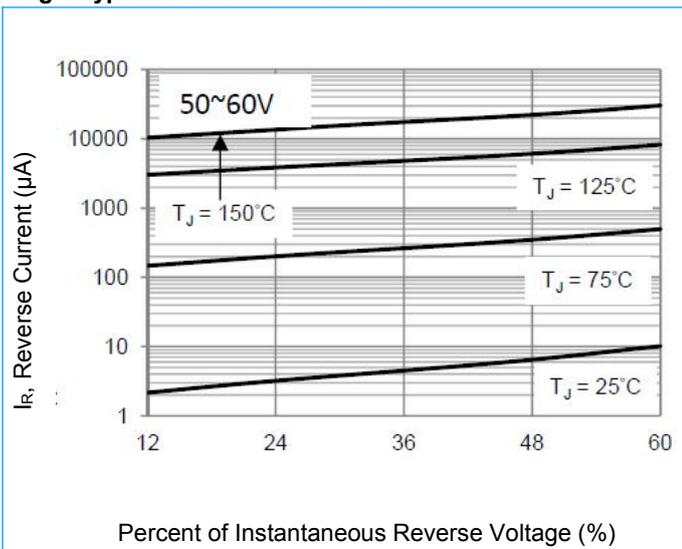
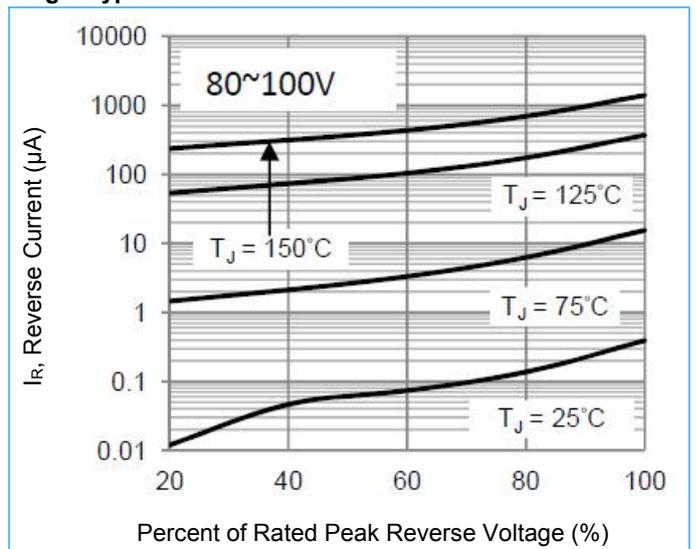
Rating and Characteristic Curves

Fig1. Forward Current Derating Curve

Fig2. Typical Forward Characteristics

Fig3. Typical Forward Characteristics

Fig4. Typical Forward Characteristics


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Rating and Characteristic Curves (Continue)

Fig5. Typical Forward Characteristics

Fig6. Typical Reverse Characteristics

Fig7. Typical Reverse Characteristics

Fig8. Typical Reverse Characteristics


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Rating and Characteristic Curves (Continue)

Fig9. Typical Reverse Characteristics

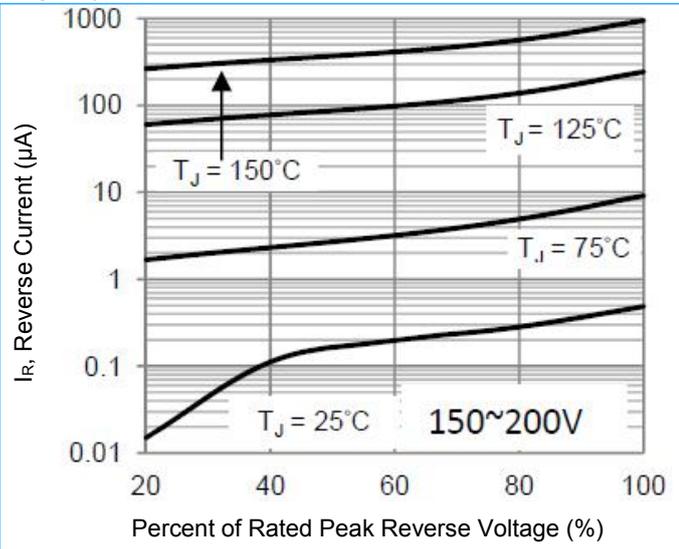
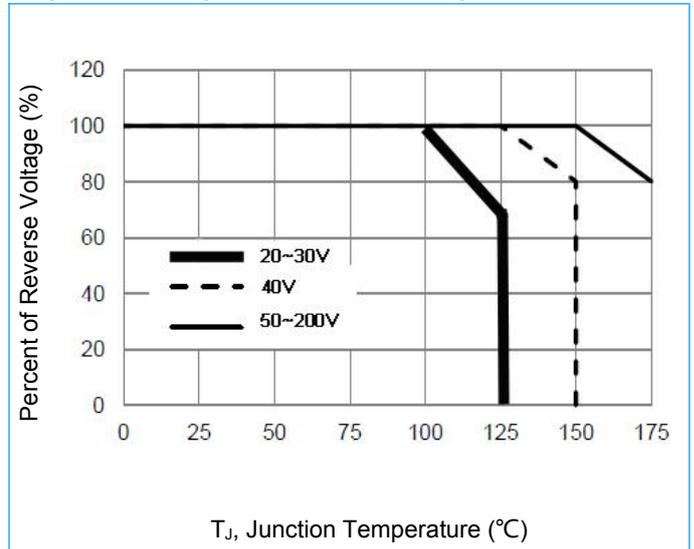
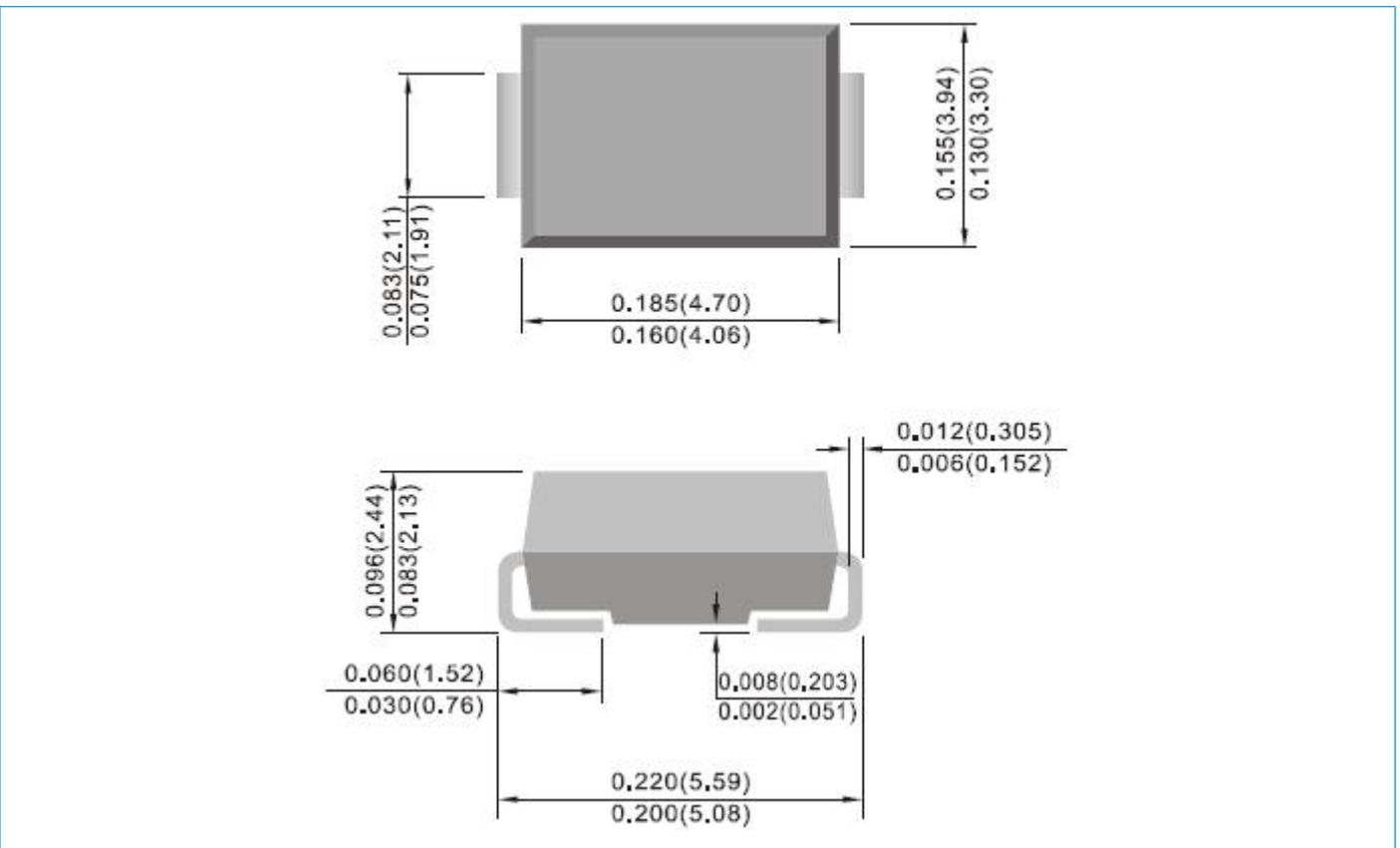


Fig10. Operating Temperature Derating Curve



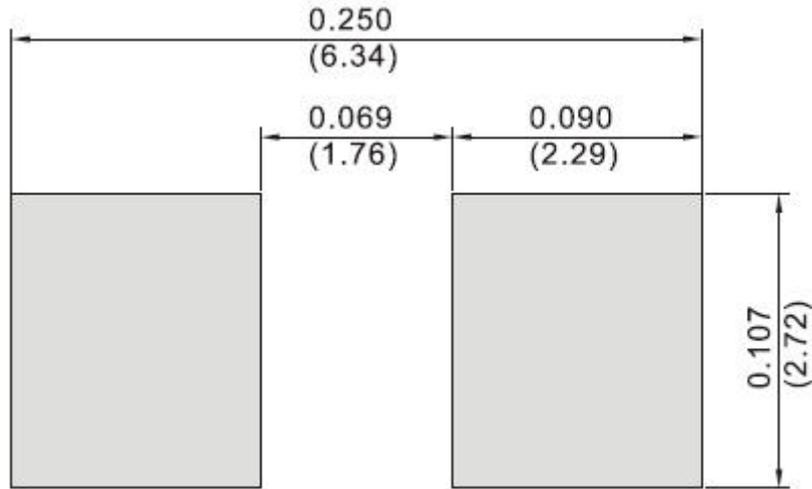
SMB/DO-214AA Package Outline (Unit: inch(mm))



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SMB/DO-214AA Mounting Pad Layout (Unit: inch(mm))



Packaging Information

Part Number	Component Package	Quantity	Packaging Option
SS32B~SS320B	SMB/DO-214AA	3000 PCS	per 13" plastic Reel
		800 PCS	per 7" plastic Reel