

Surface Mount Schottky Barrier Rectifiers

SS32C~SS320C
20 to 200 V
3A
SMC/DO-214AB

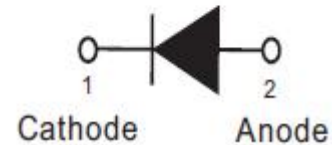
Features

- ◆ 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 Data

- ◆ Case: JEDEC DO-214AB molded plastic.
- ◆ Terminals: Solder plated, solderable per MIL-STD-750, Method 2026.
- ◆ Polarity: Color band denotes cathode end.
- ◆ Standard packaging: 16mm tape (EIA-481).
- ◆ Approx. Weight: 0.0082 ounces, 0.2325 grams.

SMC/DO-214AB



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

Parameter		Symbol	SS32C	SS33C	SS34C	SS35C	SS36C	SS38C	SS310C	SS315C	SS320C	Unit
Maximum Recurrent 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}	100									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℃	I_R	0.2			0.05						mA
	T _J =100℃		20			2		1				
Typical Thermal Resistance		R_{θJL} R_{θJA}	15 110									℃/ W
Operating Junction Temperature Range		T_J	-55 to +125		-55 to +150	-65 to +175						℃
Storage Temperature Range		T_{STG}	-55 to +150			-65 to +175						℃

Notes: 1. Pulse Test with $PW = 300\mu sec$, 1% Duty Cycle.

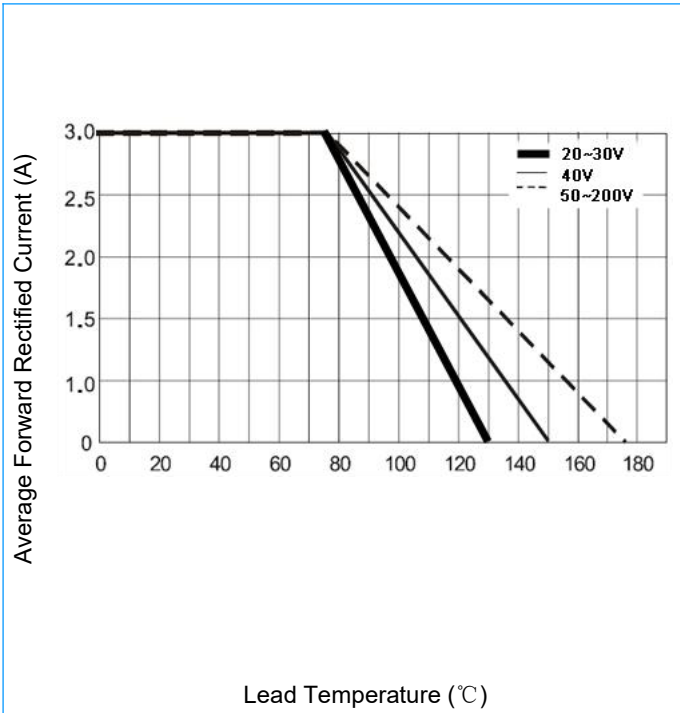
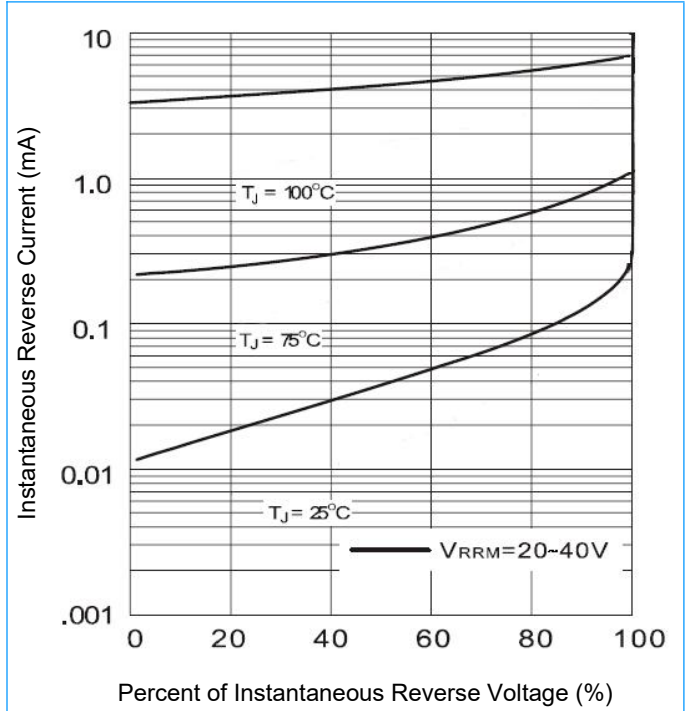
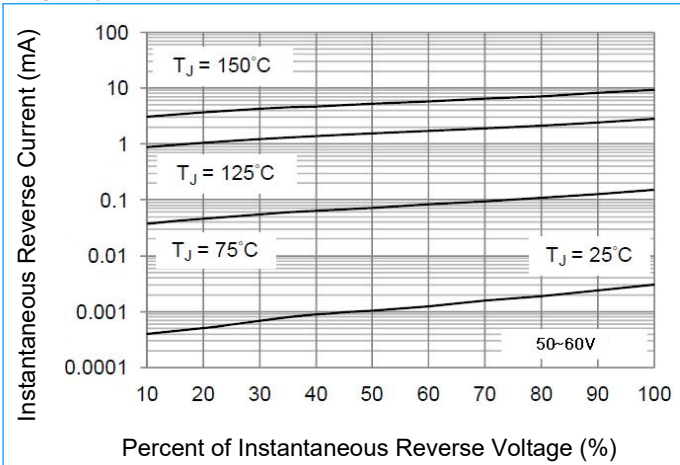
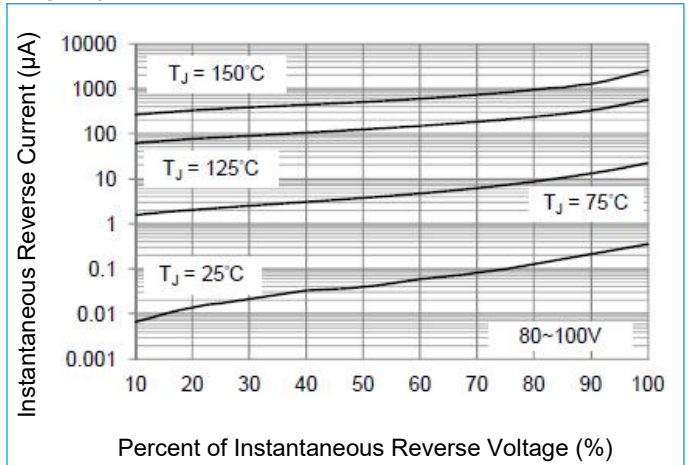
2. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area.

3. Mounted on a FR4 PCB, single-sided copper, mini pad.

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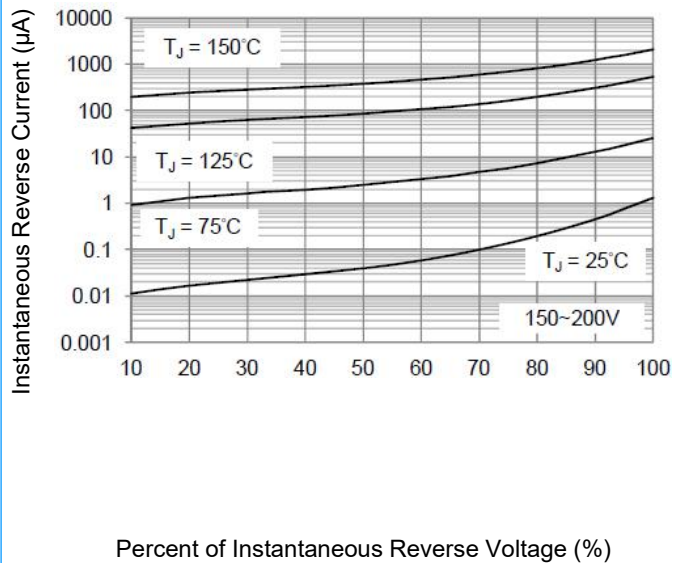
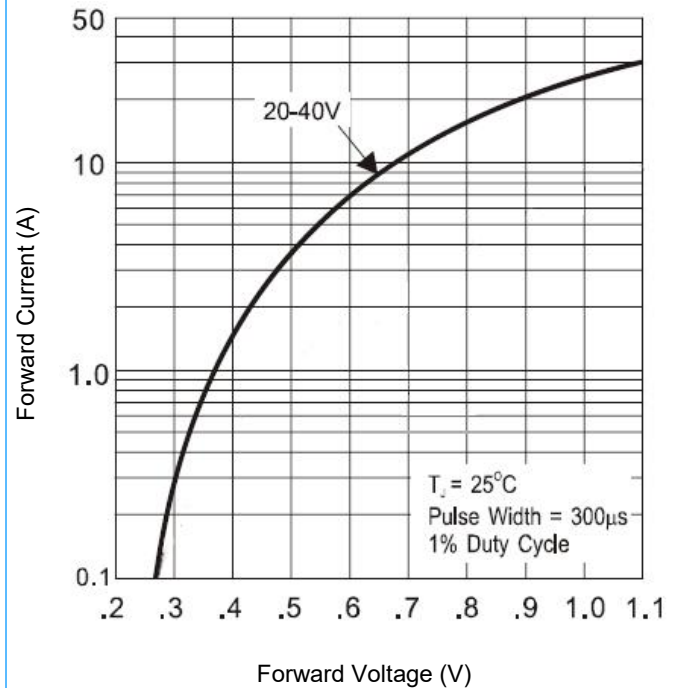
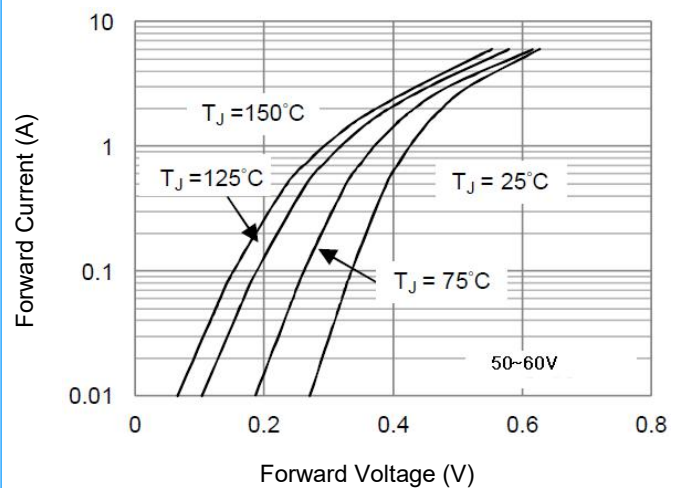
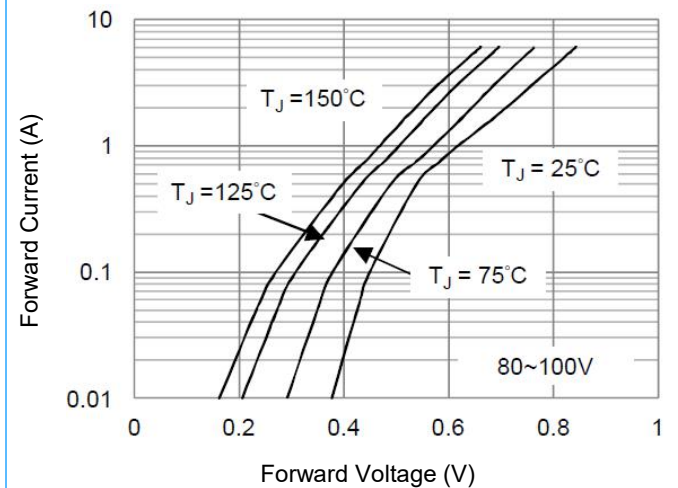
Rating and Characteristic Curves

Fig1. Forward Current Derating Curve

Fig2. Typical Reverse Characteristics

Fig3. Typical Reverse Characteristics

Fig4. Typical Reverse Characteristics


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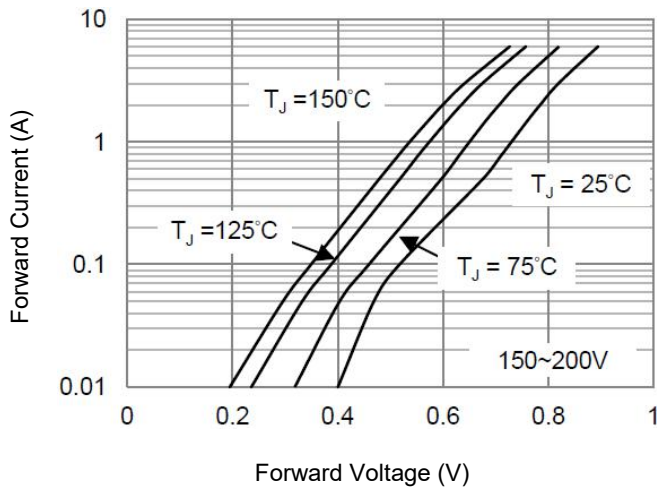
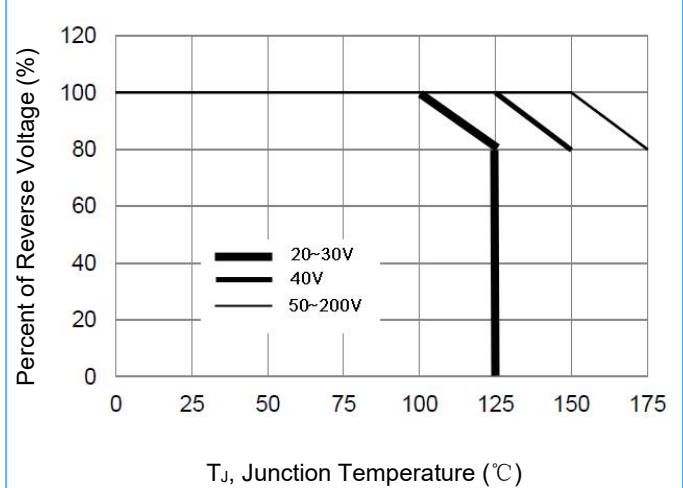
Rating and Characteristic Curves (Continue)

Fig5. Typical Reverse Characteristics

Fig6. Typical Forward Characteristics

Fig7. Typical Forward Characteristics

Fig8. Typical Forward Characteristics


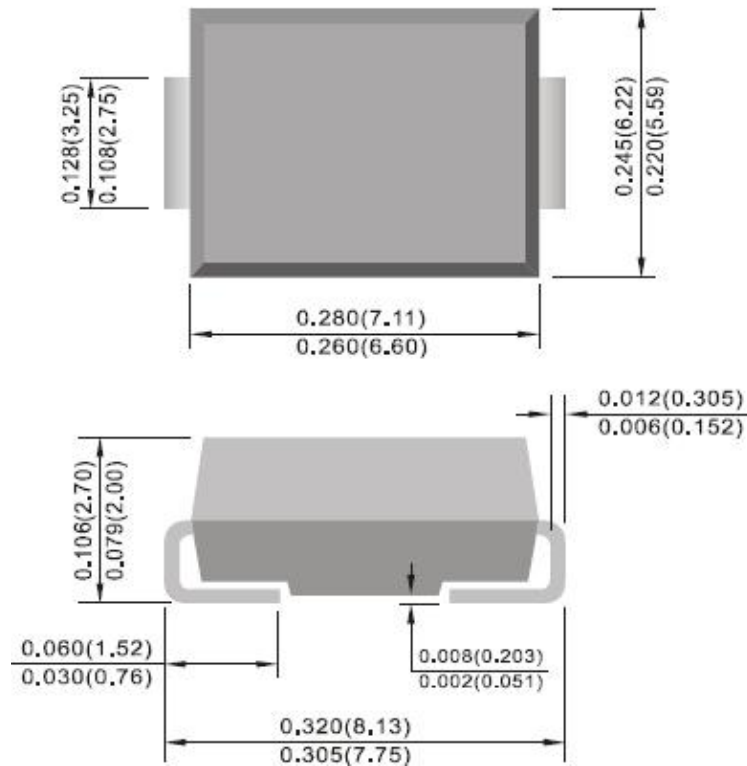
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Rating and Characteristic Curves (Continue)

Fig9. Typical Forward Characteristics

Fig10. Operating Temperature Derating Curve


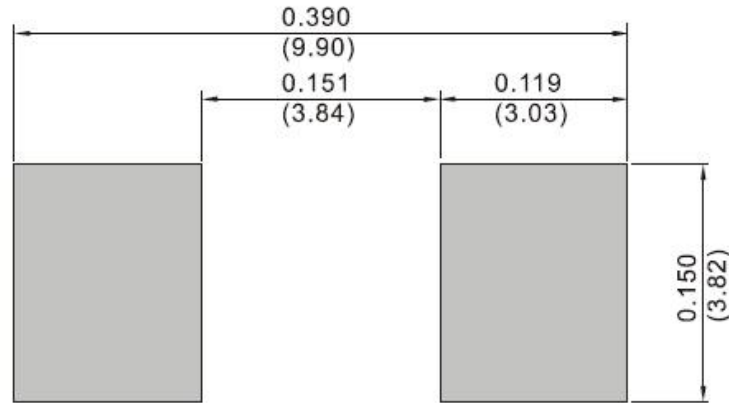
SMC/DO-214AB Package Outline (Unit: inch(mm))



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SMC/DO-214AB Mounting Pad Layout (Unit: inch(mm))



Packaging Information

Part Number	Component Package	Quantity	Packaging Option
SS32C~SS320C	SMC/DO-214AB	3000 PCS	per 13" plastic Reel
		800 PCS	per 7" plastic Reel

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