

SS32C THRU SS310C

Surface Mount Schottky Barrier Rectifiers

Reverse Voltage - 20 to 100 V

Forward Current - 3 A

Features

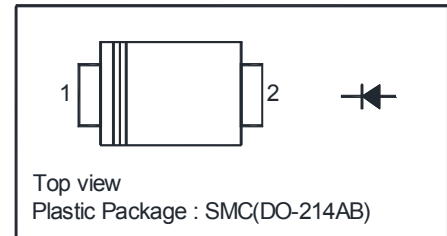
- Guard ring protection
- Low forward voltage
- High current capability

Mechanical Data

- **Case:** SMC (DO-214AB) molded plastic body
- **Polarity:** color band denotes cathode end
- **Mounting Position:** Any

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



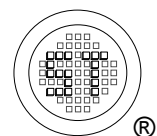
Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbols	SS32C	SS33C	SS34C	SS35C	SS36C	SS38C	SS39C	SS310C	Units
	Marking	SS32C	SS33C	SS34C	SS35C	SS36C	SS38C	SS39C	SS310C	-
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	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 Forward Voltage at 3 A	V_F	0.55		0.75		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								mA
		20		10						
Typical Junction Capacitance ¹⁾	C_j	500		350						pF
Thermal Resistance from Junction to Ambient ²⁾	$R_{\theta JA}$	55								°C/W
Operating Junction Temperature Range	T_j	- 55 to + 125								°C
Storage Temperature Range	T_{stg}	- 55 to + 150								°C

¹⁾ Measured at 1MHz and applied reverse voltage of 4 V DC.

²⁾ P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.



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Electrical characteristic curves

Fig.1 Forward Current Derating Curve

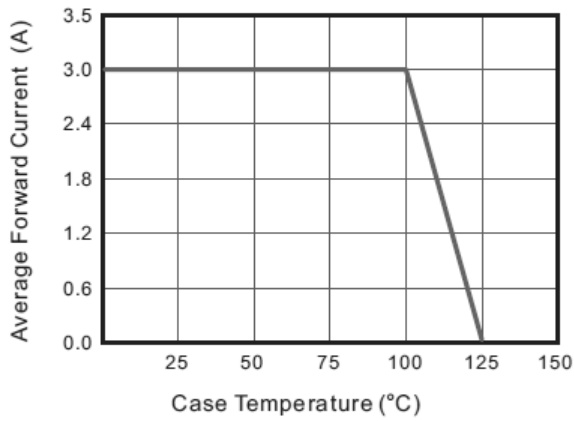


Fig.2 Typical Reverse Characteristics

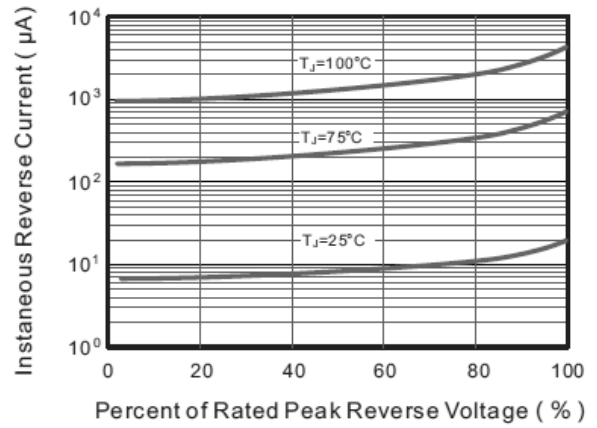


Fig.3 Typical Forward Characteristic

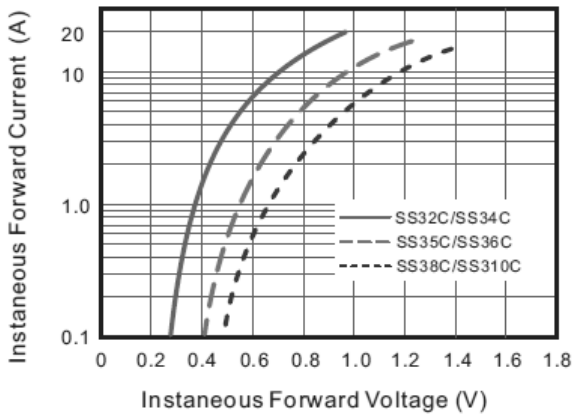


Fig.4 Typical Junction Capacitance

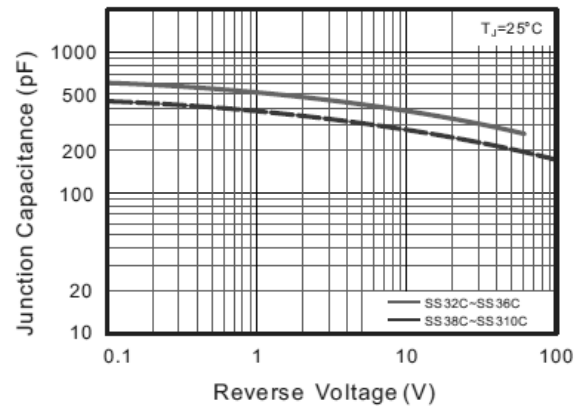


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

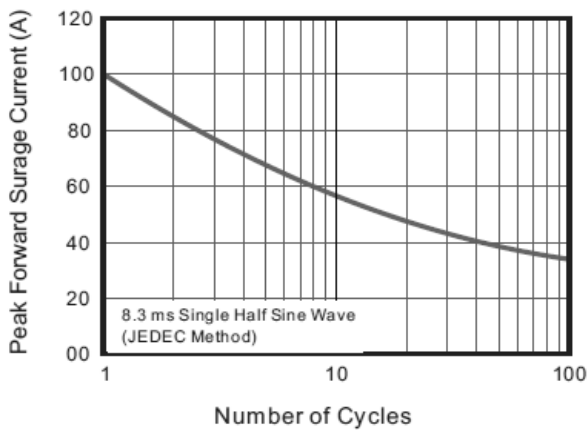
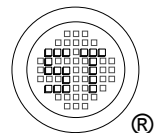
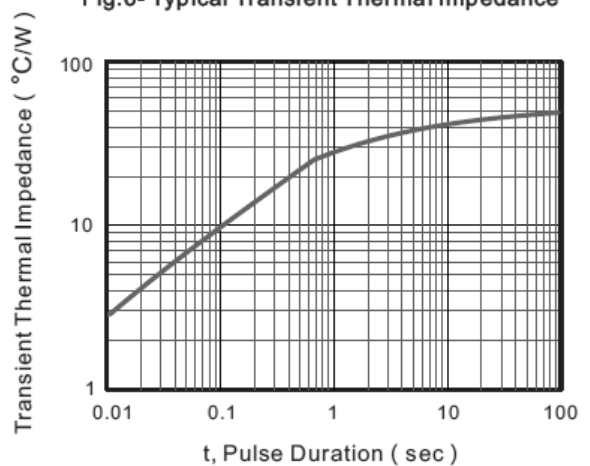


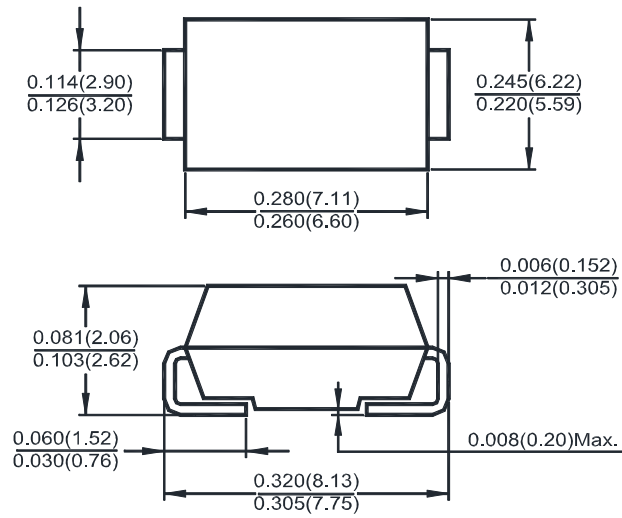
Fig.6 Typical Transient Thermal Impedance



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Package Outline Dimensions in inches (millimeters)

SMC(DO-214AB)



Marking information

" ***** " = Part No.

" III " = Cathode line

Font type: Arial

