

SS32C THRU SS310C

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 V

Forward Current - 3 A

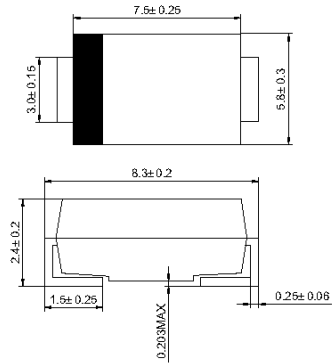
Features

- 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

SMC



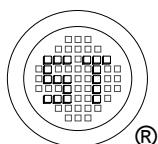
Dimensions in millimeters

Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

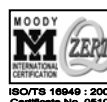
Parameter	Symbols	SS32C	SS33C	SS34C	SS35C	SS36C	SS38C	SS39C	SS310C	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current at $T_L = 90\text{ }^\circ\text{C}$	$I_{F(AV)}$	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 ¹⁾	V_F	0.5		0.75		0.85			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_J = 25\text{ }^\circ\text{C}$	0.5								mA
	$T_J = 125\text{ }^\circ\text{C}$	20		10						
Typical Thermal Resistance	$R_{\theta JL}$	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⁾ Pulse test: 300 μs pulse width, 1% duty cycle



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FIG.1 – FORWARD DERATING CURVE

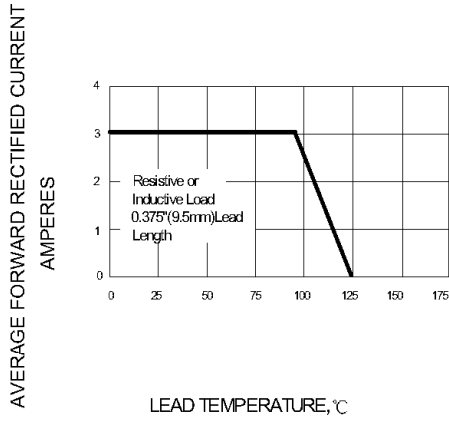


FIG.2 – PEAK FORWARD SURGE CURRENT

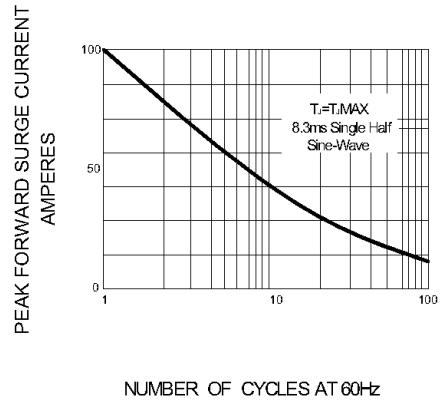
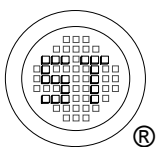
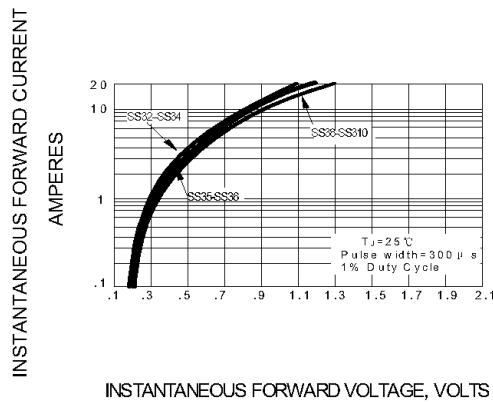


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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