## SS32C THRU SS310C

# **SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER** Reverse Voltage - 20 to 100 V

Forward Current - 3 A

## **Features**

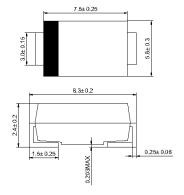
- · Guard ring protection
- · Low forward voltage
- · High current capability

## **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		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 <sub>DC</sub>	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current at $T_L$ = 90 °C	I <sub>F(AV)</sub>	3								Α
Peak Forward Surge Current, 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC method)		100							Α	
Maximum Forward Voltage at 3 A 1)		0.5			0.75			0.85		V
Maximum DC Reverse Current $T_J = 2$	; I <sub>R</sub>	0.5								mA
at Rated DC Blocking Voltage T <sub>J</sub> = 125 °C			20		10					
Typical Thermal Resistance	R <sub>eJL</sub>	17					°C/W			
Operating Junction Temperature Range		- 55 to + 125								°С
Storage Temperature Range	$T_{stg}$		- 55 to + 150							

 $<sup>^{1)}\,\</sup>text{Pulse}$  test: 300  $\mu\text{s}$  pulse width, 1% duty cycle



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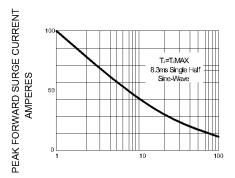


#### FIG.1 - FORWARD DERATING CURVE

## AVERAGE FORWARD RECTIFIED CURRENT Inductive Load 0.375"(9.5mm)Lead Lenath 25 100 125 150 175

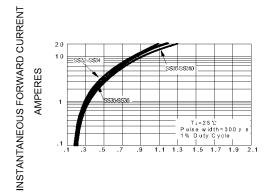
LEAD TEMPERATURE, ℃

#### FIG.2 - PEAK FORWARD SURGE CURRENT



NUMBER OF CYCLES AT 60Hz

## FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS



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