SS32C THRU SS310C

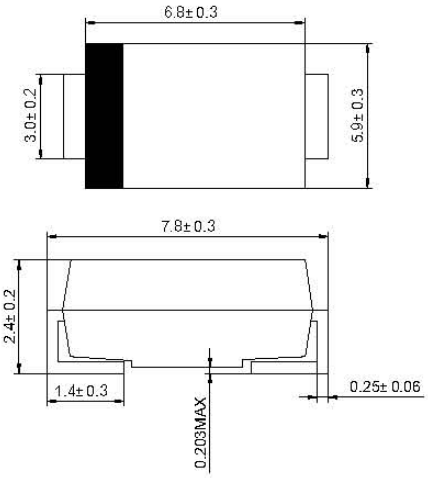
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 V
Forward Current - 3 A

Features

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

SMC (DO-214AB)



Dimensions in millineters

Mechanical Data

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

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 °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	0.55			0.75		0.85			V
Maximum DC Reverse Current T_j = 25 °C	I_R	0.5								mA
at Rated DC Blocking Voltage T_j = 125 °C		20			10					
Typical Thermal Resistance	$R_{\theta JL}$	17								°C/W
Operating Junction Temperature Range	T_j	- 55 to + 125								°C
Storage Temperature Range	T_{stg}	- 55 to + 150								°C

[1] Pulse test: 300 μs pulse width, 1% duty cycle

FIG.1 – FORWARD DERATING CURVE

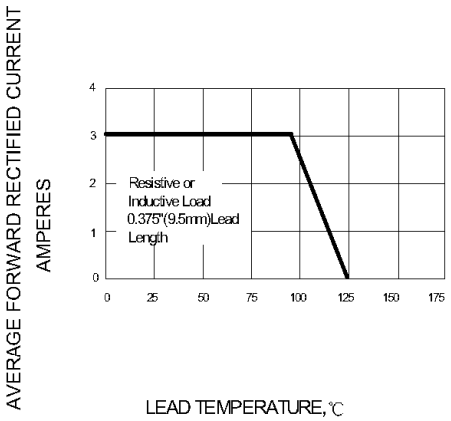


FIG.2 – PEAK FORWARD SURGE CURRENT

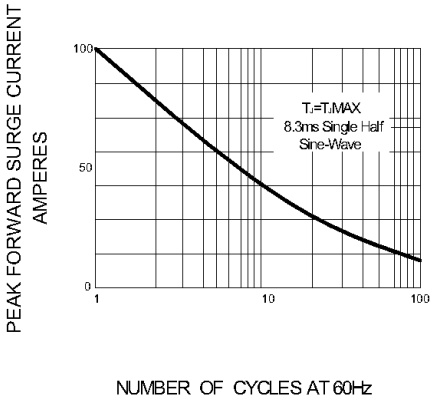


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS