

## SCHOTTKY DIODES

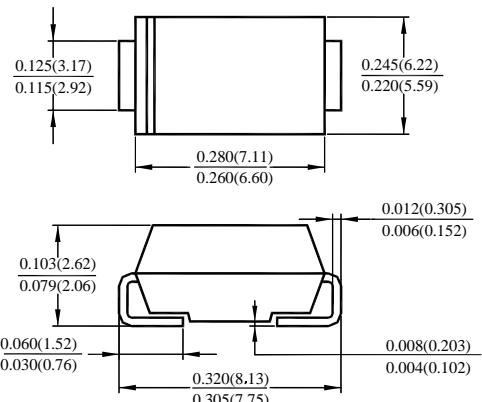
## FEATURES

Low forward voltage  
 High current capability  
 Low power loss, high efficiency  
 For use in low voltage high frequency inverters,  
 freewheeling, and polarity protection applications  
 Guarding for overvoltage protection

## MECHANICAL DATA

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

SS32---SS310



Dimensions in inches and (millimeters)

DO-214AB (SMC)

## 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, derate current by 20%.

Parameter	Symbol	SS32	SS33	SS34	SS35	SS36	SS38	SS39	SS310	Unit				
Maximum Repetitive Peak Reverse Voltage	VRRM	20	30	40	50	60	80	90	100	V				
Maximum RMS Voltage	VRMS	14	21	28	35	42	56	63	70	V				
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	80	90	100	V				
Maximum Average Forward Rectified Current at $T_L = 90^\circ\text{C}$	IF(AV)	3								A				
Peak Forward Surge Current, 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC method)	IFSM	100								A				
Maximum Forward Voltage at 3 A <sup>1)</sup>	VF	0.5		0.75		0.85				V				
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	IR	0.5											
			20		10					mA				
Typical Thermal Resistance	R <sub>JL</sub>	17								$\text{O}_\text{C}/\text{W}$				
Operating Junction Temperature Range	T <sub>j</sub>	- 55 to + 125								$\text{O}_\text{C}$				
Storage Temperature Range	T <sub>stg</sub>	- 55 to + 150								$\text{O}_\text{C}$				

1) Pulse test: 300  $\mu\text{s}$  pulse width, 1% duty cycle

## SS32---SS310 Typical Characteristics

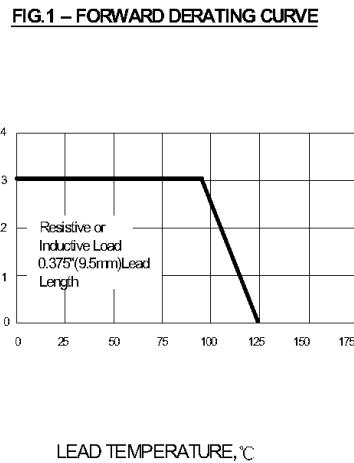
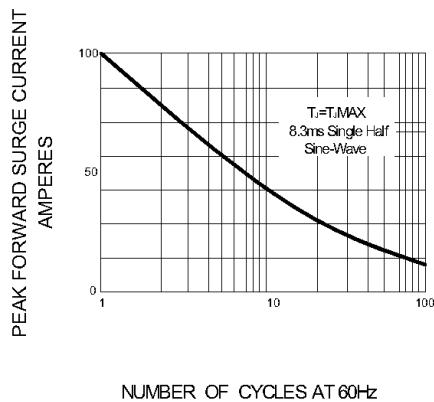
 AVERAGE FORWARD RECTIFIED CURRENT  
 AMPERES


FIG.2 – PEAK FORWARD SURGE CURRENT


 INSTANTANEOUS FORWARD CURRENT  
 AMPERES
