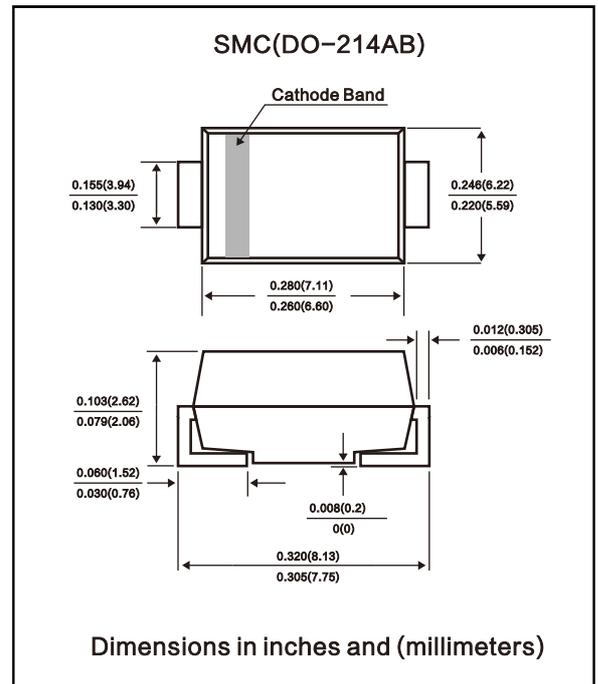


FEATURES

- Plastic Package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Guard ring for overvoltage protection
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed : 250 °C/10 seconds at terminals

MECHANICAL DATA

- Case : JEDEC SMC(DO-214AB) molded plastic body
- Terminals : Solder Plate, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Weight : 0.003 ounce, 0.093 gram


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

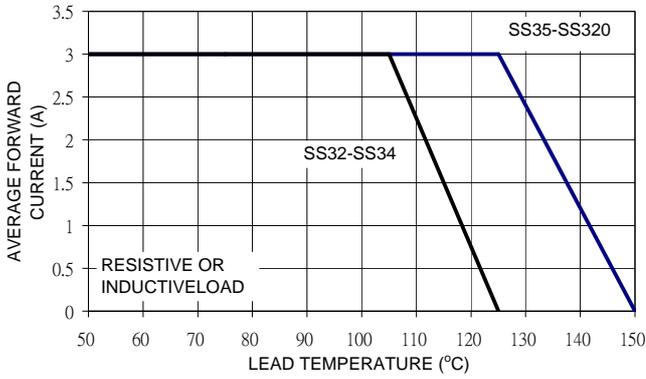
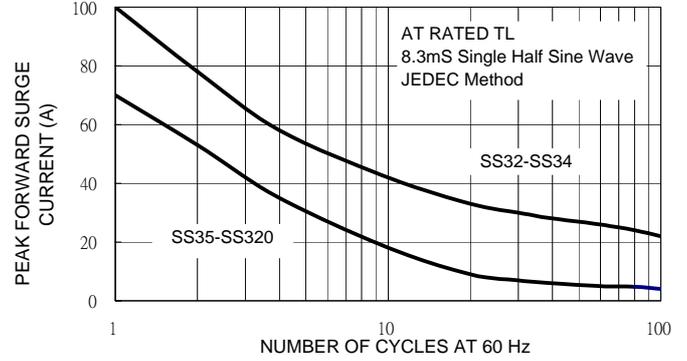
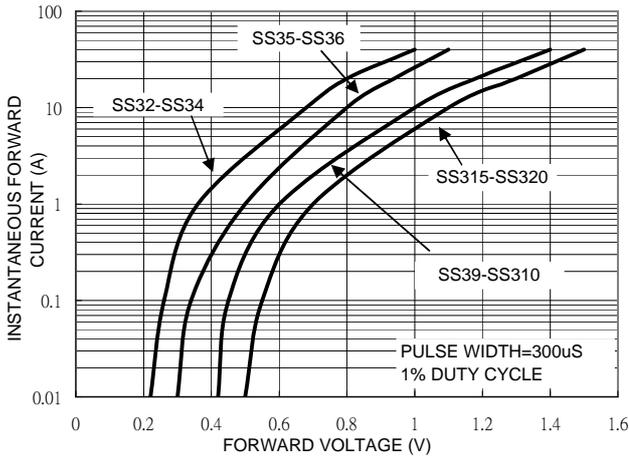
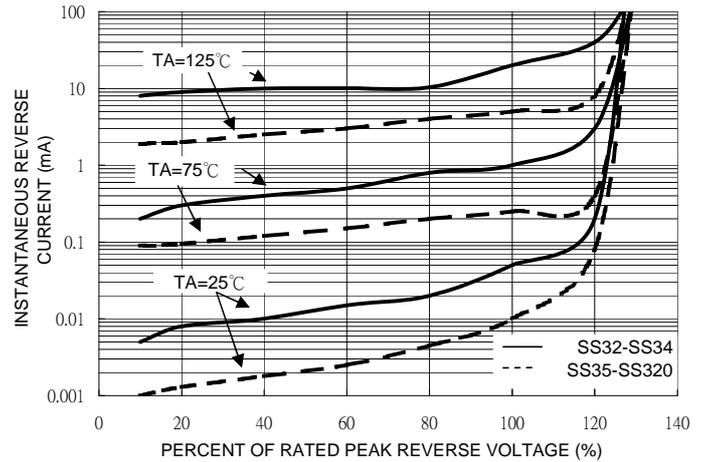
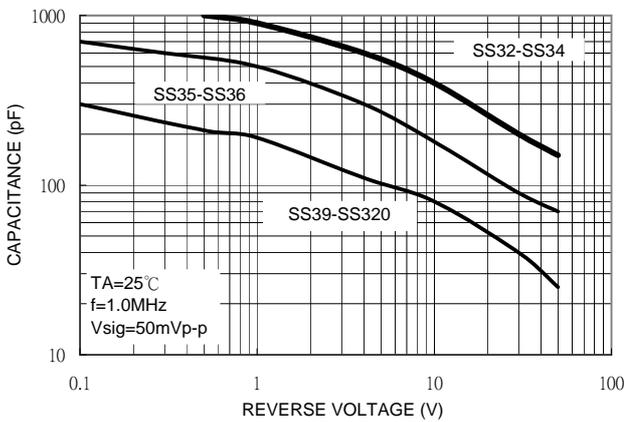
Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	SS 32C	SS 33C	SS 34C	SS 35C	SS 36C	SS 39C	SS 310C	SS 315C	SS 320C	Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	150	200	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	105	140	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	150	200	V	
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0									A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	100			70						A	
Maximum Instantaneous Forward Voltage (Note 1) @ 3.0A $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	V_F	0.5 0.4		0.75 0.65		0.85 0.70		0.95 0.80		V		
Maximum Reverse Current @ Rated VR $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	0.5			0.1			-			mA	
		10			5			-				
		-			0.5			-				
Typical Thermal Resistance	$R_{\theta JL}$ $R_{\theta JA}$	17 55										$^\circ\text{C/W}$
Operating Temperature Range	T_J	- 55 to + 125			- 55 to + 150						$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	- 55 to + 150									$^\circ\text{C}$	

Note 1: Pluse Test with PW=300 usec, 1% Duty Cycle

FIG. 1 FORWARD CURRENT DERATING CURVE

FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

FIG. 3 TYPICAL FORWARD CHARACTERISTICS

FIG. 4 TYPICAL REVERSE CHARACTERISTICS

FIG. 5 TYPICAL JUNCTION CAPACITANCE

FIG. 6 TYPICAL TRANSIENT THERMAL IMPEDANCE
