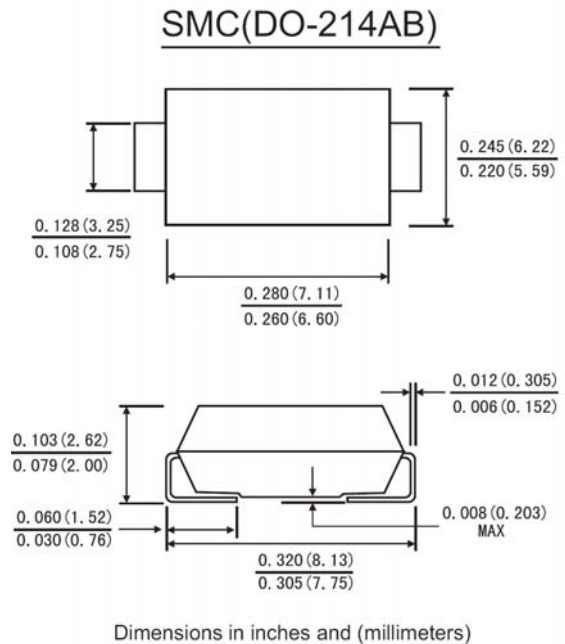


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Guard ring for over voltage 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 plated ,solder able per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Weight: 0.003ounce,0.093 gram



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

	Symbols	SS32	SS33	SS34	SS35	SS36	SS38	SS310	
		SK32	SK33	SK34	SK35	SK36	SK38	SK310	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(See Fig. 1)	$I_{(AV)}$	3.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80.0							Amp
Maximum instantaneous forward voltage at 2.0A(Note 1)	V_F	0.55		0.75			0.85		Volts
Maximum Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	1.5							mAmp
		20.0			10.0				
Typical junction capacitance(Note 3)	CJ	250			160				
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55.0							$^\circ\text{C}/\text{W}$
	$R_{\theta JA}$	17.0							
Operating Temperature Range	T_J	-65 to +125			-65 to +150				$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150							$^\circ\text{C}$

NOTES:

1. Pulse test: 300 μs pulse width, 1% duty cycle
2. P.C.B. mounted 0.55 X 0.55"(14 X 14mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES (SS32 THRU SS310)

FIG.1-FORWARD CURRENT DERATING CURVE

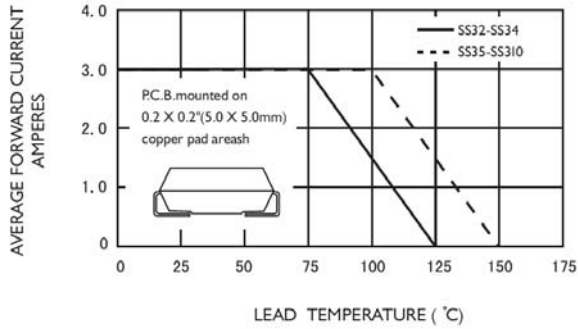


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

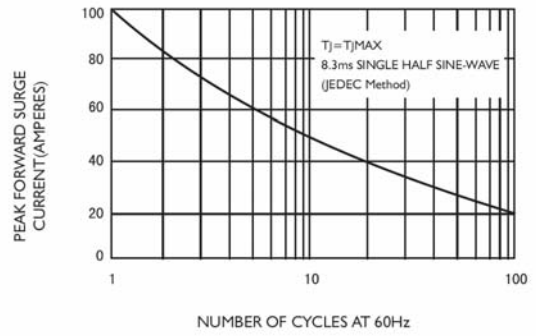


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

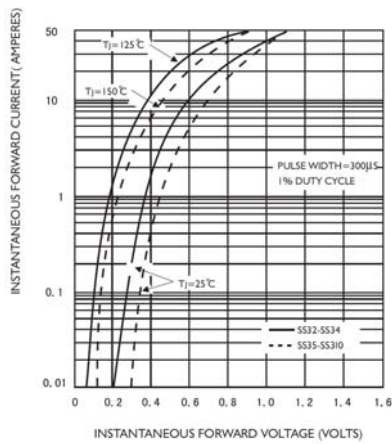


FIG.4-TYPICAL REVERSE CHARACTERISTICS

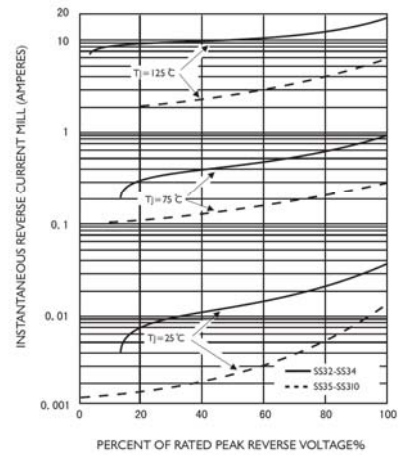


FIG.5-TYPICAL JUNCTION CAPACITANCE

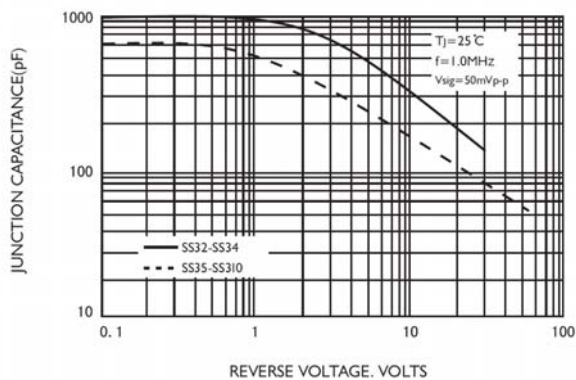


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

