

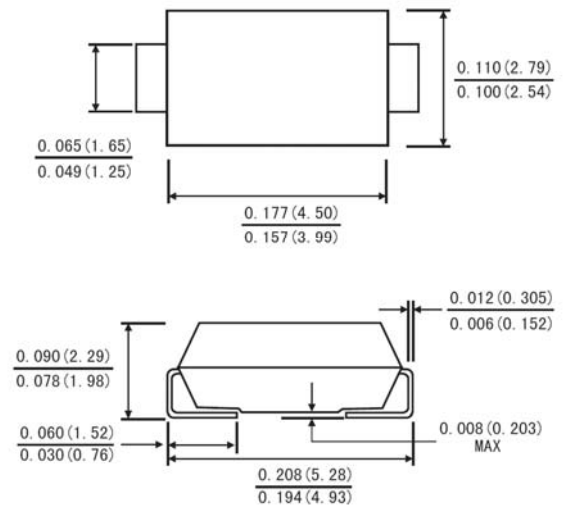
Features

- 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 SMA(DO-214AC) 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

SMA(DO-214AC)



Dimensions in inches and (millimeters)

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 Marked	SK 32	SK 33	SK 34	SK 35	SK 36	SK 38	SK 3A	SK 3A5	SK 3B	Units
		SS 32	SS 33	SS 34	SS 35	SS 36	SS 38	SS 3A	SS 3A5	SS 3B	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	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		0.90		0.95	Volts
Maximum Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	0.2									mAmp
		20			10						
Typical junction capacitance(Note 3)	C_J	250			160						pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55.0									°C/W
	$R_{\theta JC}$	17.0									
Operating Temperature Range	T_J	-65 to +125			-65 to +150						°C
Storage Temperature Range	T_{STG}	-65 to +150									°C

NOTES:

1. Pulse test: 300 μ s pulse width, 1% duty cycle
2. P.C.B. mounted 0.55 X 0.55"(14 X 14mm) copper pad areas
3. Measured at 1MHZ and reverse voltage of 4.0V

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

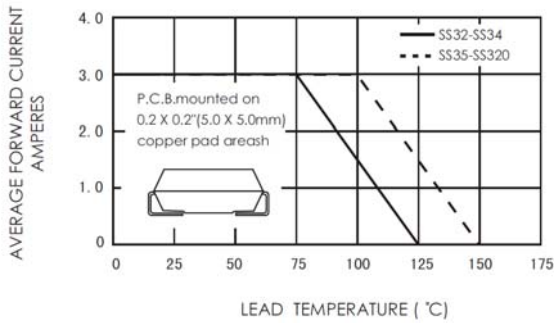


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

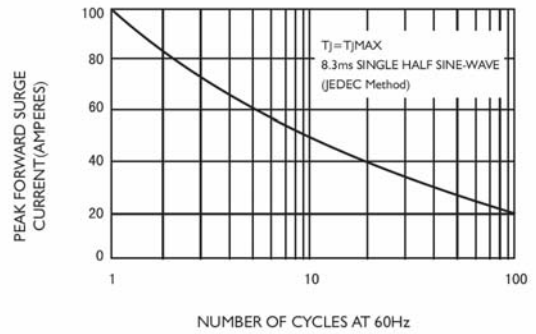


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

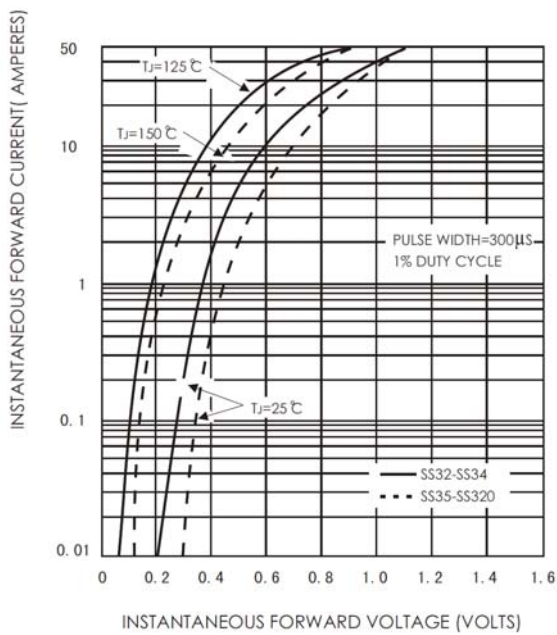


FIG.4-TYPICAL REVERSE CHARACTERISTICS

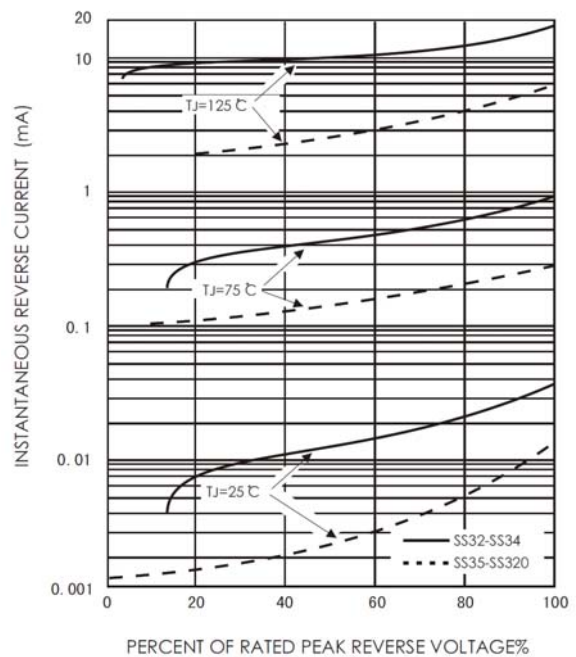


FIG.5-TYPICAL JUNCTION CAPACITANCE

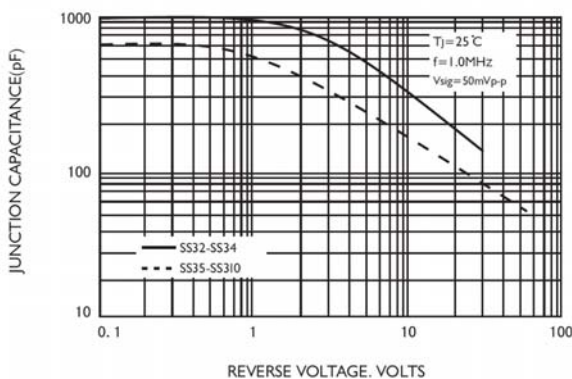


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

