

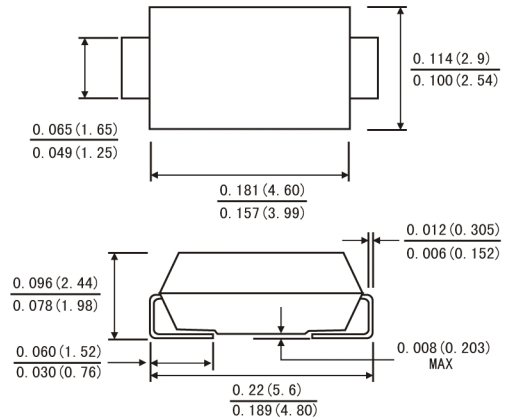
# KI SEMICONDUCTOR

## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- For surface mounted applications
- Built-in strain relief, ideal for automated placement
- High temperature soldering guaranteed: 260 °C/10 seconds at terminals
- Component in accordance to RoHS 200/95/EC and WEEE 200/96/EC



## SMA(DO-214AC)



Dimensions in inches and (millimeters)

## MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
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- Weight: 0.002 oz., 0.064 g

## 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 by 20%.)

		Symbols	S2A	S2B	S2D	S2G	S2J	S2K	S2M	Units
Maximum Recurrent Peak Reverse Voltage		$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm) lead length see Fig. 1		$I_{(AV)}$	2.0							Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method) $T_A=75^\circ\text{C}$ )		$I_{FSM}$	55.0							Amps
Maximum Instantaneous Forward Voltage at 1.0 A		$V_F$	1.1							Volts
Maximum Reverse current at rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	$I_R$	5.0							$\mu\text{A}$
	$T_A=125^\circ\text{C}$		125							
Typical Thermal resistance (Note 2)		$R_{\theta JA}$	75							$^\circ\text{C/W}$
		$R_{\theta JL}$	27							
Maximum Reverse Recovery Time (Note 1)		$T_{rr}$	2.5							$\mu\text{s}$
Operating and Storage temperature Range		$T_J$	-55 to+150							$^\circ\text{C}$
		$T_{STG}$	-55 to+150							

Note: 1. Test conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{rr}=0.25\text{A}$

2. Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm) lead length, P.C.B. Mounted

# RATINGS AND CHARACTERISTIC CURVES S2A THRU S2M

FIG.1-FORWARD CURRENT DERATING CURVE

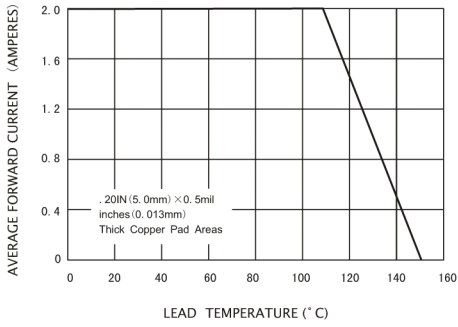


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

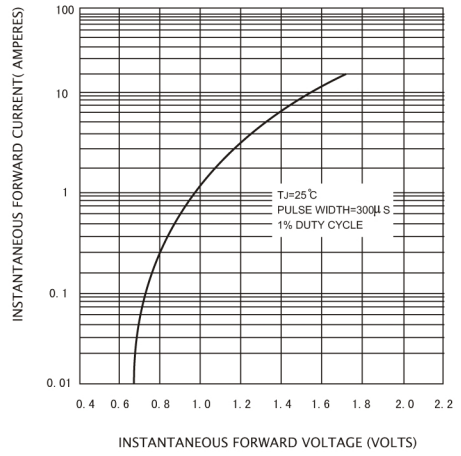


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

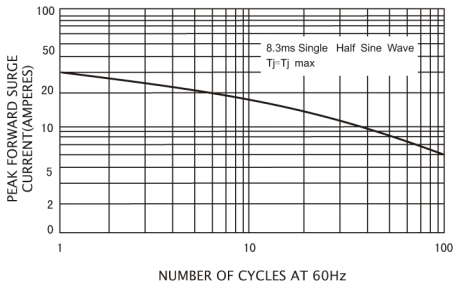


FIG.4-TYPICAL REVERSE CHARACTERISTICS

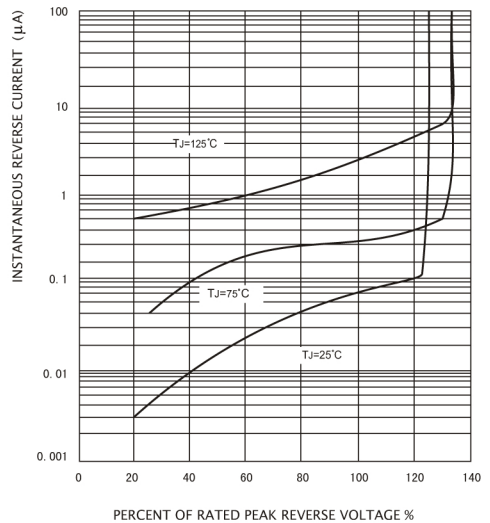


FIG.5-TYPICAL JUNCTION CAPACITANCE

