## SK32A THRU SK3AA

## Surface Mount Schottky Barrier Rectifiers Reverse Voltage - 20 to 100 V Forward Current - 3 A

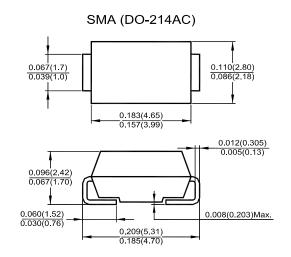
#### **Features**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- · Low power loss, high efficiency.
- · High current capability, low forward voltage drop

### **Mechanical Data**

 Case: SMA (DO-214AC) molded plastic body
Terminals: leads solderable per MIL-STD-750, Method 2026

· Polarity: color band denotes cathode end



Dimensions in inches and (millimeters)

## **Maximum Ratings and Electrical Characteristics**

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

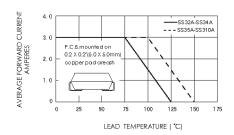
capacitive load, derate by 2070									
Parameter	Symbols	SK32A	SK33A	SK34A	SK35A	SK36A	SK38A	SK3AA	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	3							Α
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	100							Α
Maximum Instantaneous Forward Voltage at 3 A	V <sub>F</sub>	0.55			.7 0.85		85	V	
Maximum DC Reverse Current $T_a = 25$ °C at Rated DC Blocking Voltage $T_a = 100$ °C	I <sub>R</sub>	0.5 20							mA
Typical Thermal Resistance 1)	$R_{ heta JA} \ R_{ heta JL}$	55 17							°C/W
Operating Junction Temperature Range	T <sub>j</sub>	- 55 to + 125							°C
Storage Temperature Range	T <sub>stg</sub>	- 55 to + 150							°C

 $<sup>^{\</sup>rm 1)}$  P.C.B. mounted with 0.55 X 0.55 " (14 X 14 mm) copper pad areas.

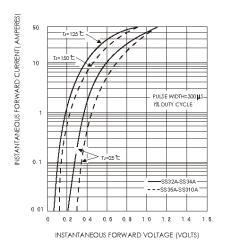


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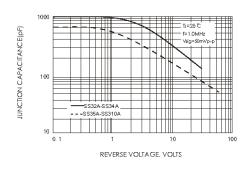
#### FORWARD CURRENT DERATING CURVE



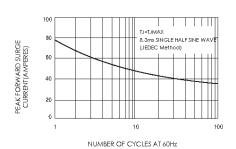
# TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



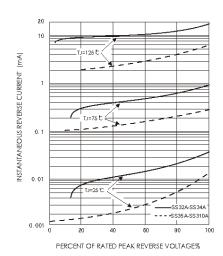
#### TYPICAL JUNCTION CAPACITANCE



# MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



### TYPICAL REVERSE CHARACTERISTICS



#### TYPICAL TRANSIENT THERMAL IMPEDANCE

