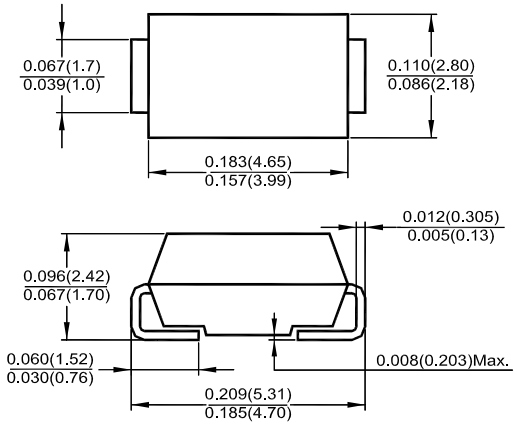
SK32A THRU SK3AA-HAF

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
- Halogen and Antimony Free(HAF), RoHS compliant

SMA (DO-214AC)



Dimensions in inches and (millimeters)

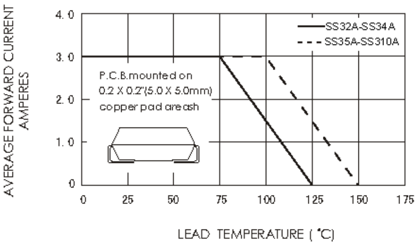
Mechanical Data
- **Case:** SMA (DO-214AC) molded plastic body
- **Terminals:** leads solderable per MIL-STD-750, Method 2026
- **Polarity:** color band denotes cathode end

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%

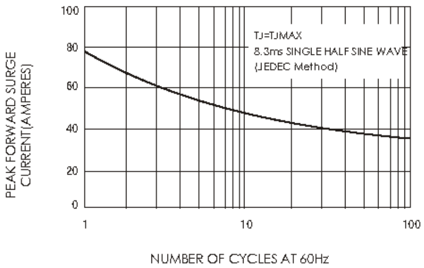
Parameter	Symbols	SK32A	SK33A	SK34A	SK35A	SK36A	SK38A	SK3AA	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	100							A
Maximum Instantaneous Forward Voltage at 3 A	V_F	0.55			0.7		0.85		V
Maximum DC Reverse Current T_a = 25 °C	I_R	0.5							mA
at Rated DC Blocking Voltage T_a = 100 °C		20							
Typical Thermal Resistance [1]	$R_{\theta JA}$	55							°C/W
	$R_{\theta JL}$	17							
Operating Junction Temperature Range	T_j	- 55 to + 125							°C
Storage Temperature Range	T_{stg}	- 55 to + 150							°C

[1] P.C.B. mounted with 0.55 X 0.55 " (14 X 14 mm) copper pad areas.

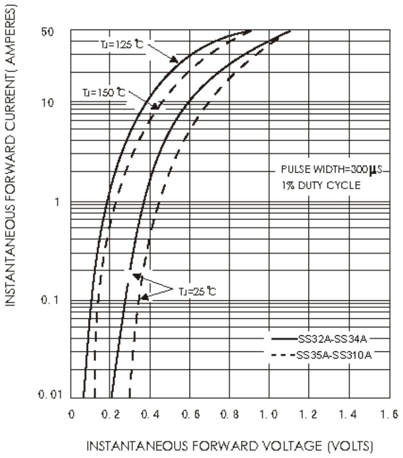
FORWARD CURRENT DERATING CURVE



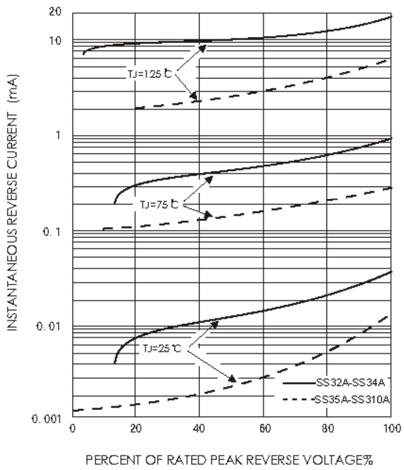
MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



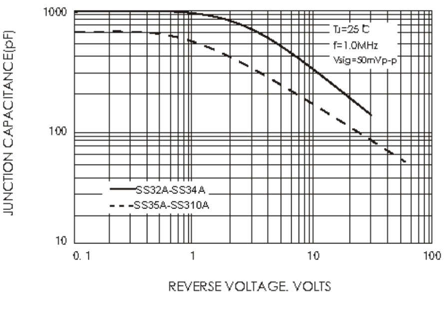
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



TYPICAL REVERSE CHARACTERISTICS



TYPICAL JUNCTION CAPACITANCE



TYPICAL TRANSIENT THERMAL IMPEDANCE