

# Schottky Barrier Rectifier 3A,20 to 200V DO-214AC SMA

SK3XA Series

MERITEK

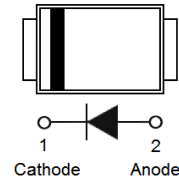
## FEATURES

- Low Power loss, high efficiency
- Low profile package
- High Current capacity
- UL Flammability Classification 94V-0



## MECHANICAL DATA

- Case: Molded Plastic, DO-214AC(SMA)
- Terminals: Solderable per MIL-STD-750, method 2026
- Polarity: Color Band denotes Cathode End



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

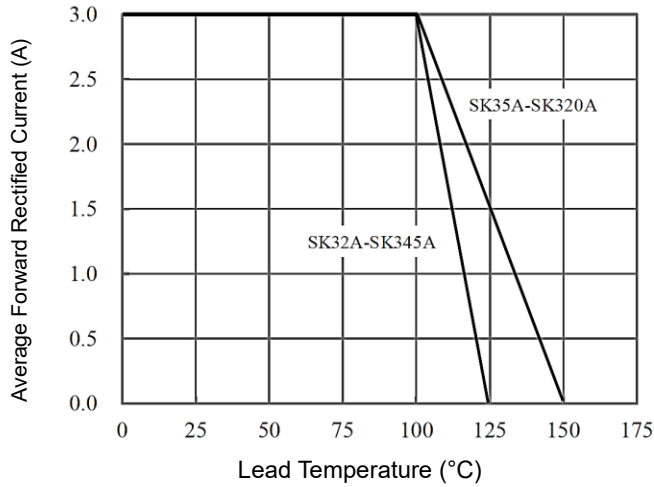
Parameter	Symbol	SK3 2A	SK3 3A	SK3 4A	SK3 45A	SK3 5A	SK3 6A	SK3 8A	SK3 10A	SK3 15A	SK3 20A	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	31.5	35	42	56	71	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	45	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current at $T_L$	$I_{(AV)}$	3.0										A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	80.0										A
Maximum Forward Voltage at 2.0A	$V_F$	0.55			0.70		0.85		0.95			V
Maximum Reverse Current at Rated DC Blocking Voltage	$T_A=25^{\circ}C$	0.5										mA
	$T_A=100^{\circ}C$	20.0										
Typical Thermal Resistance-Junction to Ambient	$R_{\theta JA}$	55.0										$^{\circ}C/W$
	$R_{\theta JL}$	17.0										
Operating Junction Temperature Range	$T_J$	-65 to +125					-65 to +150					$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-65 to +150										$^{\circ}C$

Note:

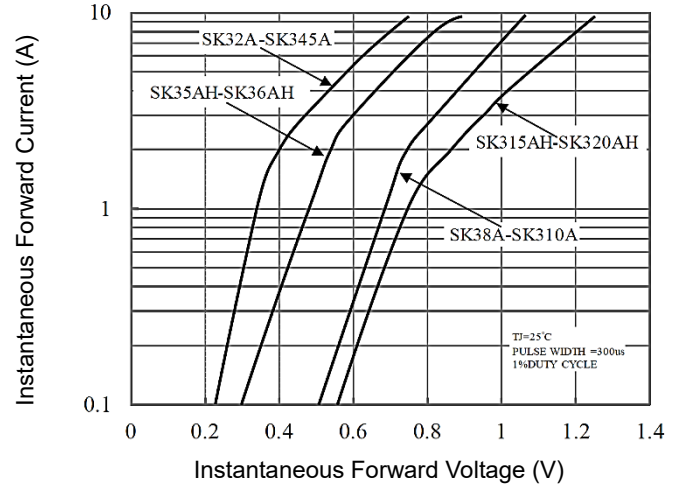
1. Ratings at 25°C ambient temperature unless otherwise specified.
2. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.
3. Pulse test: 300µs pulse width, 1% duty cycle
4. Thermal resistance from junction to lead mounted on P.C.B. with 0.55 x 0.55 (14 x 14 mm) copper pad areas

## CHARACTERISTIC CURVES

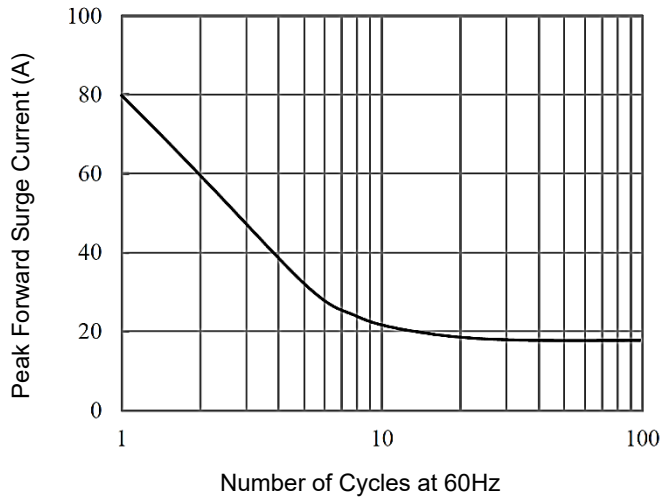
Typical Forward Current Derating Curve



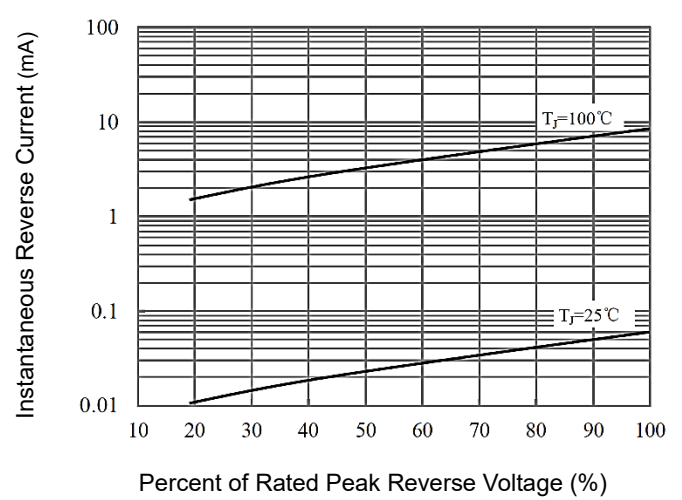
Typical Instantaneous Forward Characteristics



Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristics



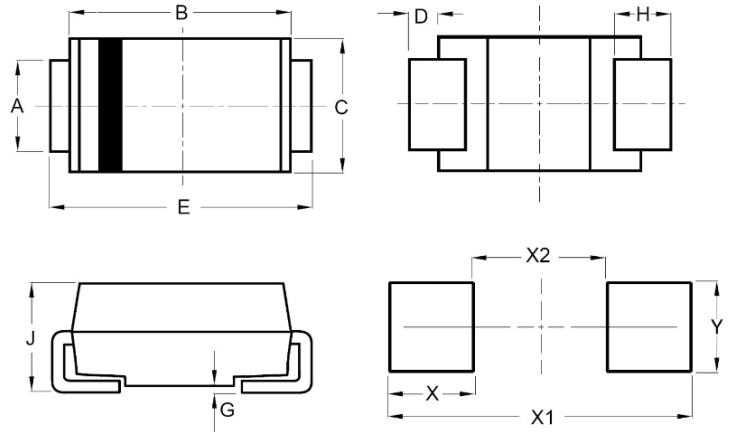
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## DIMENSIONS

Item	Min. (mm)	Max. (mm)
A	1.230	1.700
B	4.000	4.600
C	2.180	2.900
D	0.152	0.305
E	4.700	5.310
G	0.000	0.203
H	0.760	1.520
J	1.700	2.440
X	2.500	
X1	6.500	
X2	1.500	
Y	1.700	



\*Specifications subject to change without notice