



# FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

## SK32A THRU SK3AA

### SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 V

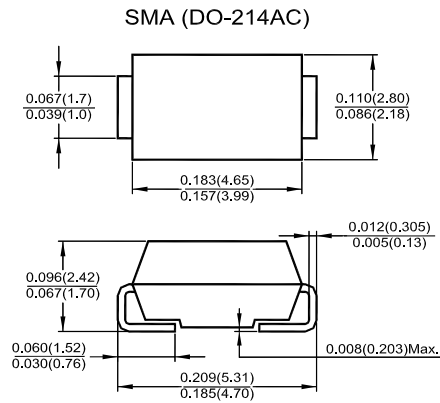
Forward Current - 3 A

#### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Built-in strain relief, ideal for automated placement
- For surface mount applications
- Low profile package
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

#### Mechanical Data

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



Dimensions in inches and (millimeters)

#### Absolute Maximum Ratings and Characteristics

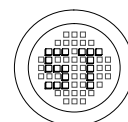
Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, resistive or inductive load, For capacitive load, derate by 20%

Parameter	Symbols	SK32A	SK33A	SK34A	SK35A	SK36A	SK38A	SK3AA	Units
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	57	71	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Length	$I_{(AV)}$	3							A
Peak Forward Surge Current, 8.3 ms Single Half-sine-wave Superimposed on rated load (JEDEC method)	$I_{FSM}$	80							A
Maximum Forward Voltage at 3 A DC <sup>1)</sup>	$V_F$	0.55		0.75		0.85		V	
Maximum Reverse Current at Rated DC Blocking Voltage <sup>1)</sup>	$I_R$	20		10		0.5		mA	
Typical Junction Capacitance <sup>3)</sup>	$C_J$	250		160				pF	
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$ $R_{\theta JL}$	88		28				°C/W	
Operating Junction Temperature Range	$T_J$	- 65 to + 125		- 65 to + 150				°C	
Storage Temperature Range	$T_S$	- 65 to + 150							°C

<sup>1)</sup> Pulse test: 300  $\mu$ s pulse width, 1% duty cycle.

<sup>2)</sup> P.C.B. mounted with 0.55 X 0.55" (14 X 14 mm) copper pad areas.

<sup>3)</sup> Measured at 1 MHz and applied reverse voltage of 4 V.





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## SK32A THRU SK3AA

FIG.1-FORWARD CURRENT DERATING CURVE

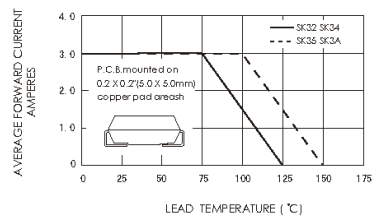


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

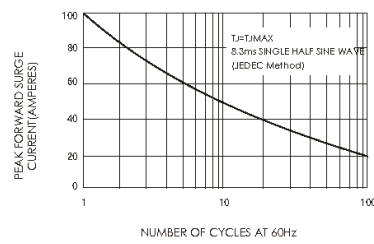


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

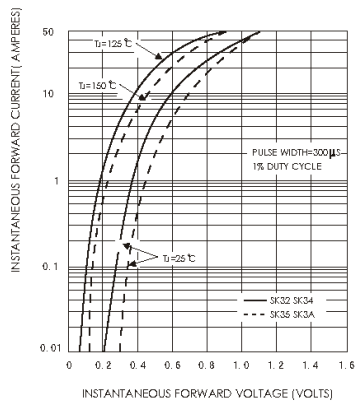


FIG.4-TYPICAL REVERSE CHARACTERISTICS

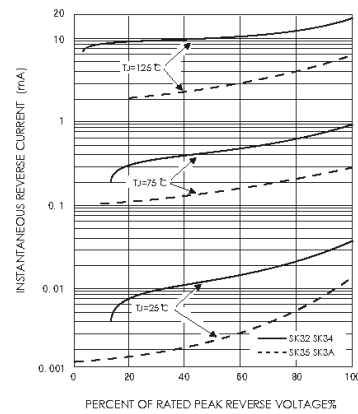


FIG.5-TYPICAL JUNCTION CAPACITANCE

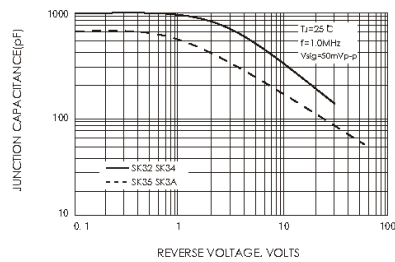


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

