

## SK32 THRU SK38

### TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 80 Volts

CURRENT - 3.0 Amperes

#### FEATURES

- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Glass passivated junction

#### MECHANICAL DATA

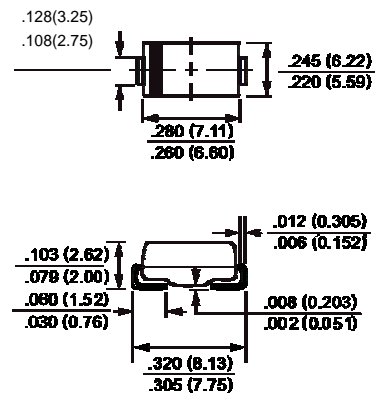
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rateflame retardant
- \* Terminals: Solder plated solderable per MIL-STD-750, Method 2026
- \* Polarity: As marked
- \* Mounting position: Any
- \* Weight: 0.24 gram

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



SMC ( DO-214AB )



Dimensions in inches and (millimeters)

	SYMBOL	SK32	SK33	SK34	SK35	SK36	SK38	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature	IO	3.0						Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	100						Amps
Maximum Instantaneous Forward Voltage at 3.0A DC	VF	0.55		0.70		0.85		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	@ $T_A = 25^\circ C$						mAmps
		2.0						
		@ $T_A = 100^\circ C$						
		20						
Typical Thermal Resistance (Note 1)	R $\theta$ JA	55						$^\circ C/W$
Typical Junction Capacitance (Note 2)	CJ	200						pF
Operating Temperature Range	TJ	-55 to + 125						$^\circ C$
Storage Temperature Range	T $_{STG}$	-55 to +150						$^\circ C$

- NOTES: 1. Thermal Resistance (Junction to Ambient).  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
3. P.C.B Mounted with 0.4X0.4in<sup>2</sup>(10.0X10.0mm<sup>2</sup>) copper pad area.

RATING AND CHARACTERISTIC CURVES ( SK32 THRU SK38 )

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

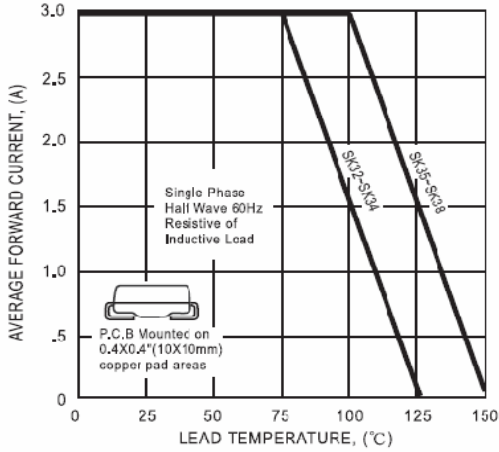


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

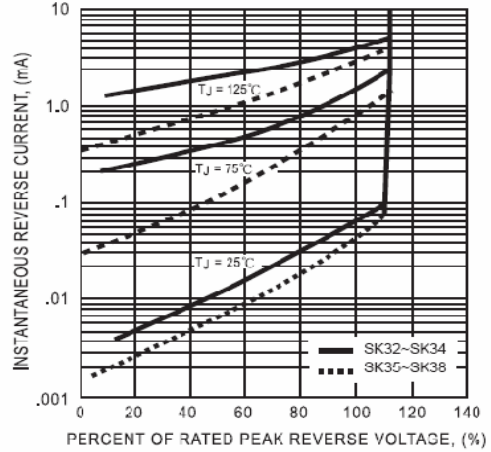


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

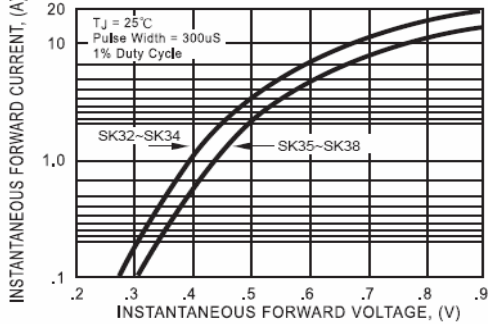


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

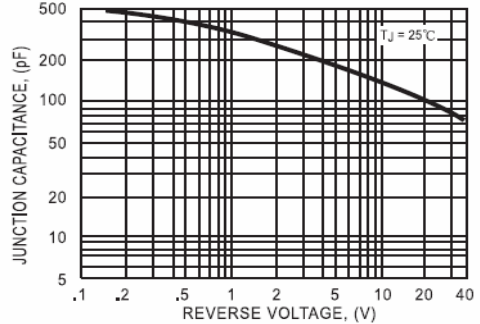


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

