



# SK32C THRU SK315C

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

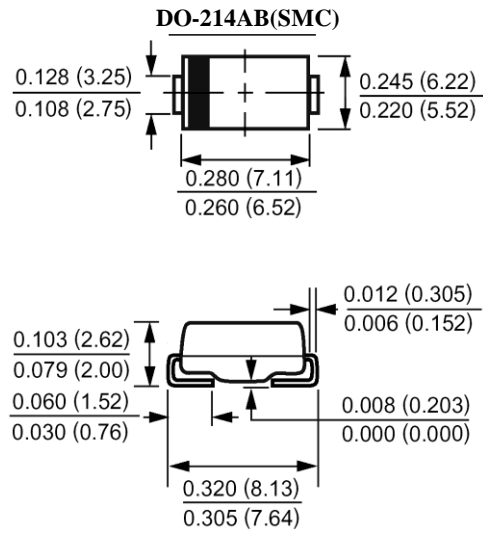
**REVERSE VOLTAGE:** 20 to 150 VOLTS  
**FORWARD CURRENT:** 3.0 AMPERE

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- High current capacity
- Built-in strain relief
- Low profile package
- Metal to silicon rectifier. majority carrier conduction
- High surge capacity
- Low power loss, high efficiency
- Suffix " H " indicated Halogen-free part, ex.SK32CH

### MECHANICAL DATA

Case : Molded plastic, DO-214AB(SMC)  
 Terminals : Solder plated, solderable per MIL-STD-750, method 2026 guaranteed  
 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, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

Parameter	Symbols	SK32C	SK33C	SK34C	SK35C	SK36C	SK38C	SK39C	SK310C	SK315C	Units
Maximum Recerrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	90	100	150	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	64	71	105	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	90	100	150	Volts
Maximum Average Forward Rectified Current at $T_L$ (See Fig. 1)	$I_{(AV)}$	3.0									Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	80.0									Amp
Maximum Forward Voltage at 3.0A (Note 1)	$V_F$	0.55			0.75		0.85		0.95		Volts
Maximum Reverse Current at $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$	$I_R$	0.5									mAmp
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55.0									°C/W
	$R_{\theta JL}$	17.0									
Operating Junction Temperature Range	$T_J$	-55 to +125				-55 to +150					°C
Storage Temperature Range	$T_{stg}$	-55 to +150									°C

#### NOTES:

- 1- Pulse test: 300µs pulse width, 1% duty cycle
- 2- P.C.B. mounted with 0.55 x 0.55" (14 x 14mm) Copper Pad Areas



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### RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

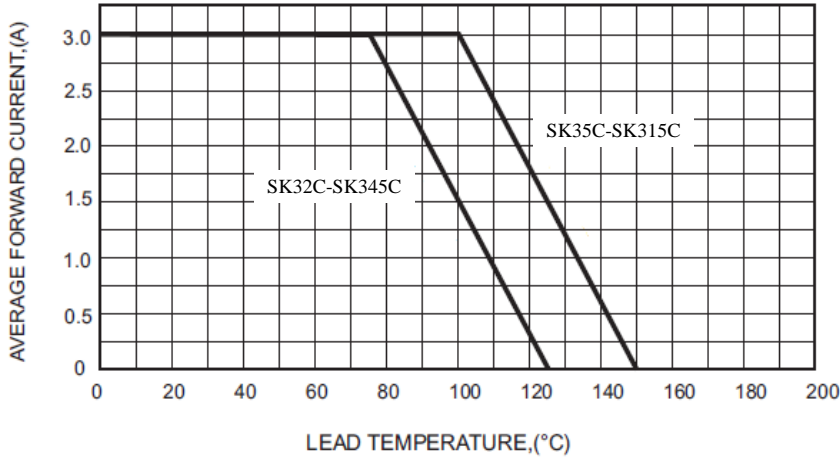


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

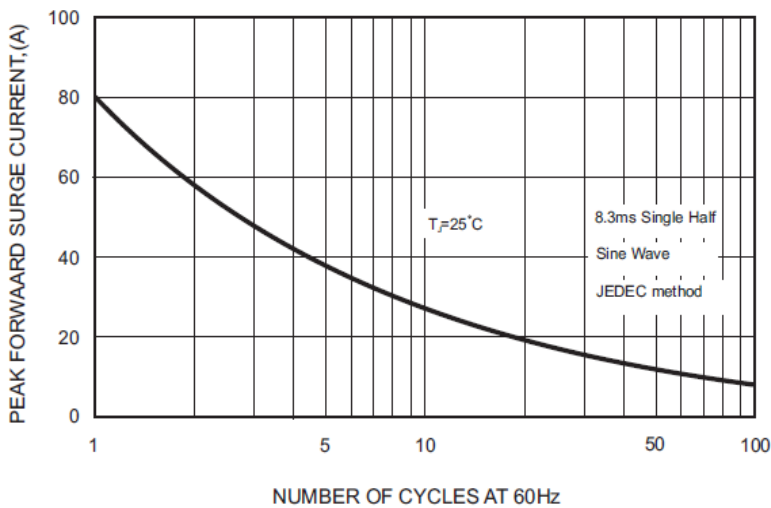


FIG.4-TYPICAL JUNCTION CAPACITANCE

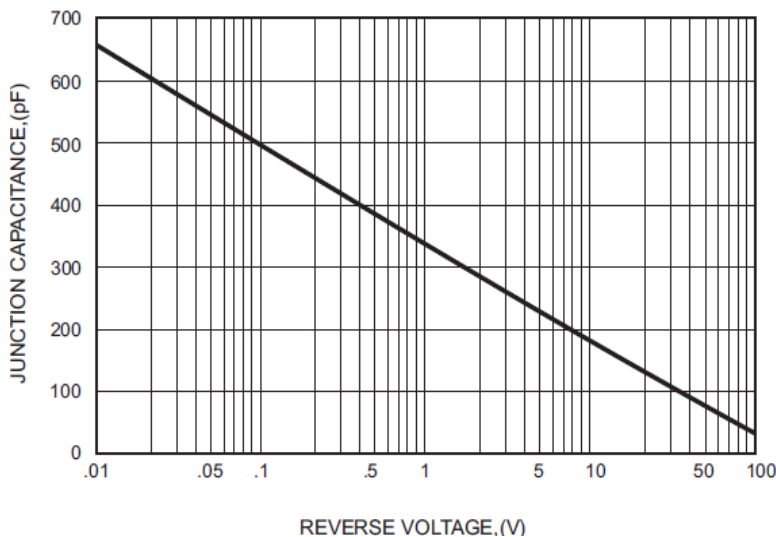


FIG.2-TYPICAL FORWARD CHARACTERISTICS

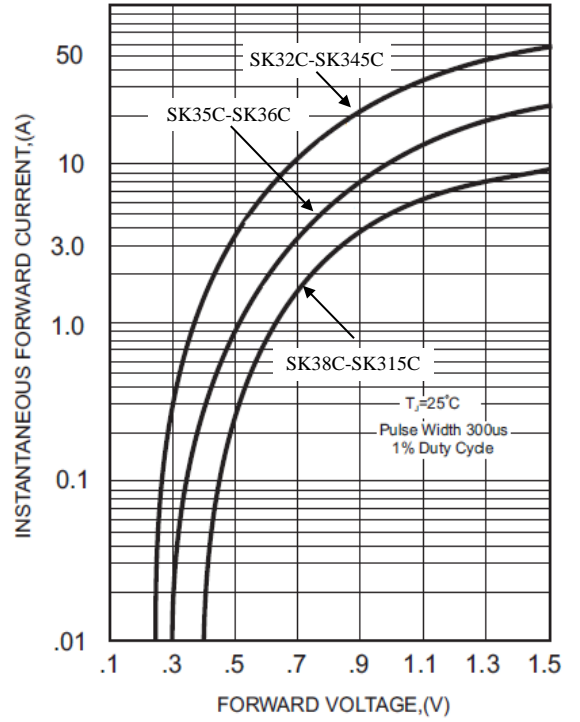


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

