



# SK22B THRU SK220B

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**REVERSE VOLTAGE:** 20 to 200 VOLTS

**FORWARD CURRENT:** 2.0 AMPERE

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- High current capacity
- Low profile package
- Suffix "H" indicates Halogen-free parts, ex. SK22BH

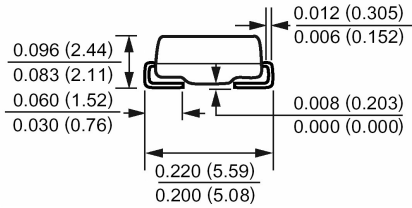
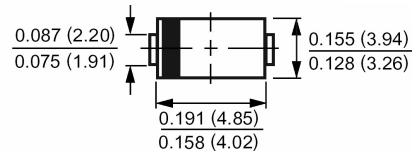
### MECHANICAL DATA

Case : Molded plastic, DO-214AA(SMB)

Terminals : Solder plated, solderable per MIL-STD-750, method 2026 guaranteed

Polarity : Color band denotes cathode end

DO-214AA(SMB)



Dimensions in inch and (millimeter)

### 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	SK22B	SK23B	SK24B	SK25B	SK26B	SK28B	SK210B	SK215B	SK220B	Units	
Maximum Recercent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	Volts	
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	71	105	140	Volts	
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	Volts	
Maximum Average Forward Rectified Current at $T_L$ (See Fig. 1)	$I_{(AV)}$	2.0									Amp	
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50.0									Amp	
Maximum Forward Voltage at 2.0A (Note 1)	$V_F$	0.55		0.75		0.85		0.95			Volts	
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	$I_R$	0.5					20.0					mAmp
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	75.0										°C/W
	$R_{\theta JL}$	17.0										
Operating Junction Temperature Range	$T_J$	-65 to +125					-65 to +150					°C
Storage Temperature Range	$T_{stg}$	-65 to +150										°C

NOTES:

1- Pulse test: 300µs pulse width, 2% duty cycle

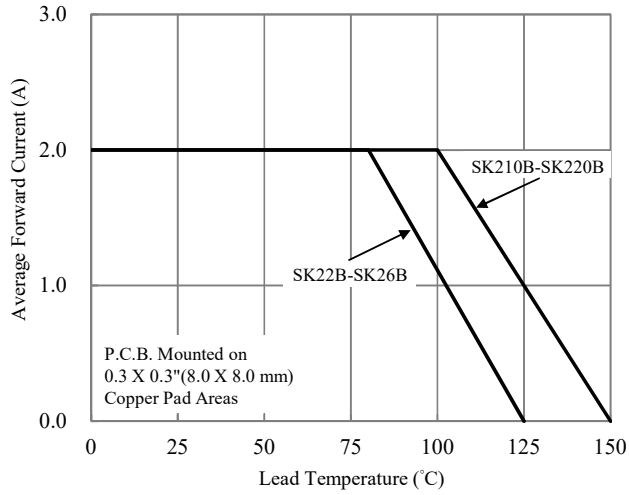
2- P.C.B. mounted with 0.3 x 0.3" (8.0 x 8.0mm) Copper Pad Areas



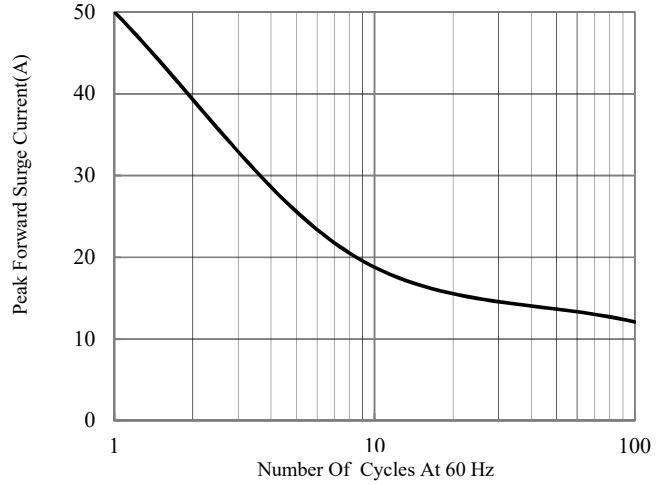
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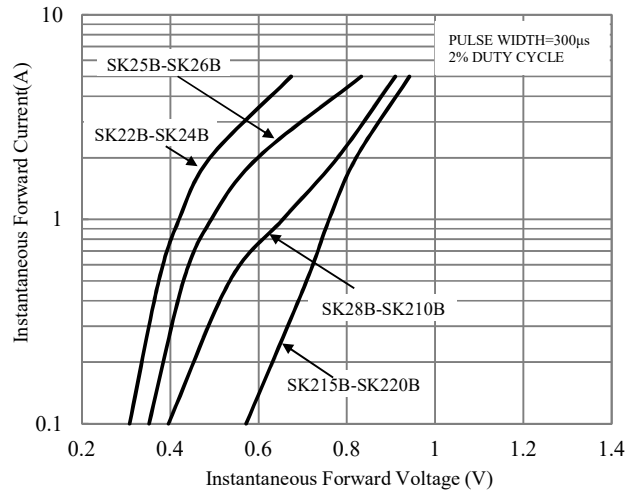
### RATINGS AND CHARACTERISTIC CURVES



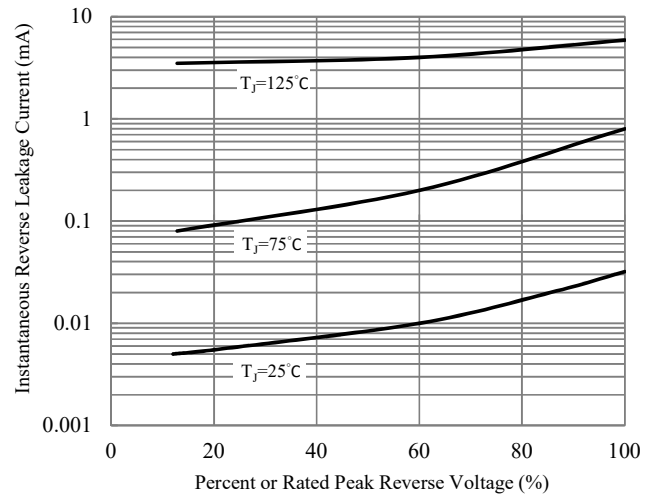
**Fig.1-Forward Current Derating Curve**



**Fig.2-Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.3-Typical Instantaneous Forward Characteristics**



**Fig.4-Typical Reverse Leakage Characteristics**