



# SK225

## 2.0 AMPS. SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS



**VOLTAGE RANGE**  
20 to 60 Volts  
**CURRENT**  
2.0 Amperes

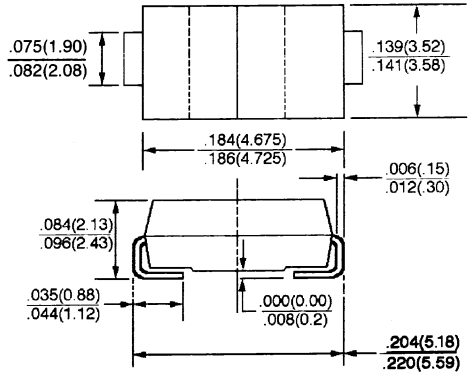
### FEATURES

- \* For surface mounted application
- \* Metal to silicon rectifier, majority carrier conduction
- \* Low forward voltage drop
- \* Easy pick and place
- \* High surge current capability
- \* Plastic material used carries Underwriters Laboratory classification 94V-0
- \* Epitaxial construction
- \* Extremely low thermal resistance

### MECHANICAL DATA

- \* CASE: Molded plastic
- \* Terminals: Solder plated
- \* Polarity: Indicated by cathode band
- \* Weight: 0.01 grams typical

### SMB/DO-214AA



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

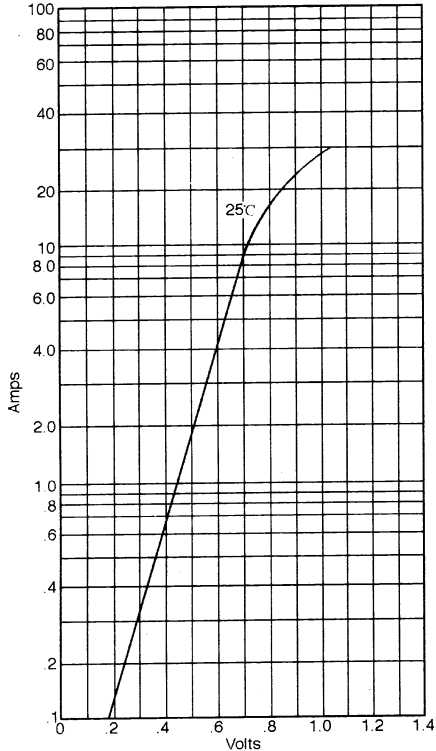
For capacitive load, derate current by 20%

TYPE NUMBER	SYMBOLS	SK225	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	25	V
Working Peak Reverse Voltage	$V_{RWM}$	25	V
Maximum Average Forward Rectified Current See fig. 4	$I_{F(AV)}$	2.0	A
Peak Forward Surge Current, 8.3ms, half sine, $T_J = 150^\circ\text{C}$	$I_{FSM}$	50	A
Maximum Instantaneous Forward Voltage @ 1.0A (NOTE 1)	$V_F$	0.55	V
Maximum peak Reverse Current at $V_{RRM}$ @ $T_A = 25^\circ\text{C}$	$I_{RM}$	0.5	mA
Typical Thermal Resistance (NOTE 2)	$R_{\theta JL}$	15	$^\circ\text{C/W}$
Typical Junction Capacitance (NOTE 3)	$C_J$	50	pF
Operating and Storage Temperature Range	$T_J, T_{STG}$	-40 ~ +150	$^\circ\text{C}$

- NOTE: (1) Pulse test width 300  $\mu\text{sec}$ , Duty cycle 2%.  
 (2) P. C. B mounted with  $0.2 \times 0.2''$  (5 x 5mm) copper pad areas  
 (3) Measured at 1MHz and applied  $V_R = 5.0\text{V}$  D. C.

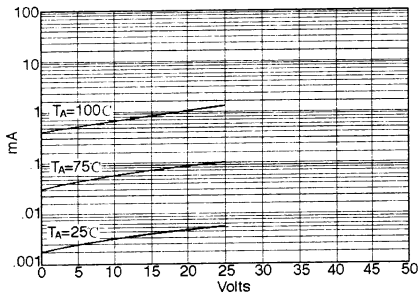
## RATINGS AND CHARACTERISTIC CURVES (SK225)

Figure 1 – TYPICAL FORWARD CHARACTERISTICS



Instantaneous Forward Current-Ampere versus Instantaneous Forward Voltage-Volts

Figure 2 – TYPICAL REVERSE CHARACTERISTICS



Typical Reverse Current-mA versus Reverse Voltage-Volts

Figure 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

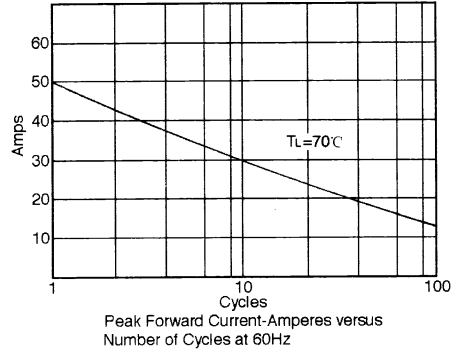
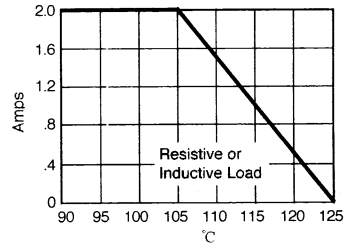


Figure 4 – Forward Current Derating Curve



Maximum Allowable Lead Temperature-°C versus Average Forward Current-Ampere

### SUGGESTED SOLDER PAD LAYOUT

