



SK225

2.0 AMPS. SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS



VOLTAGE RANGE
20 to 60 Volts
CURRENT
2.0 Amperes

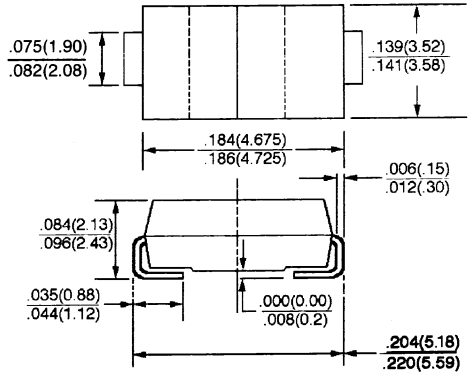
FEATURES

- * 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	$^\circ\text{C}$

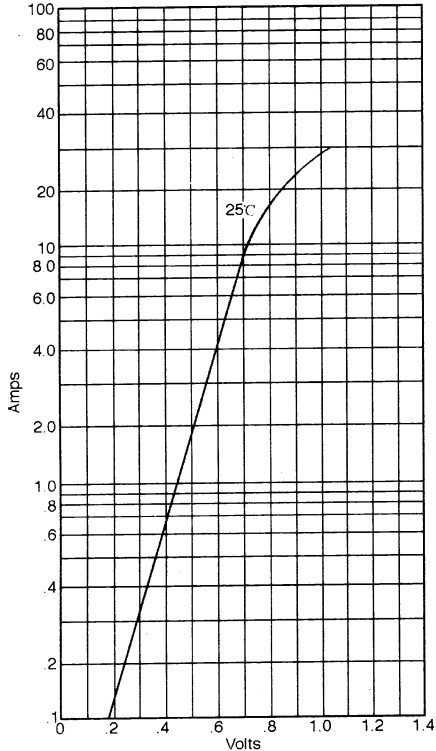
NOTE: (1) Pulse test width 300 μsec , Duty cycle 2%.

(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.

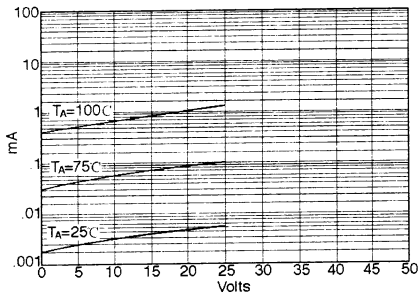
RATINGS AND CHARACTERISTIC CURVES (SK225)

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

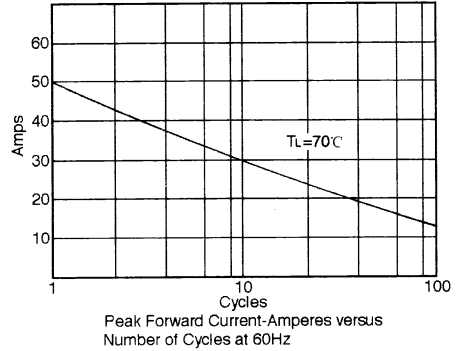
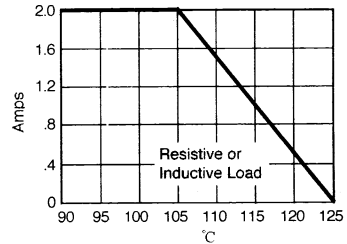


Figure 4 – Forward Current Derating Curve



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

SUGGESTED SOLDER PAD LAYOUT

