

# SK22 THRU SK225

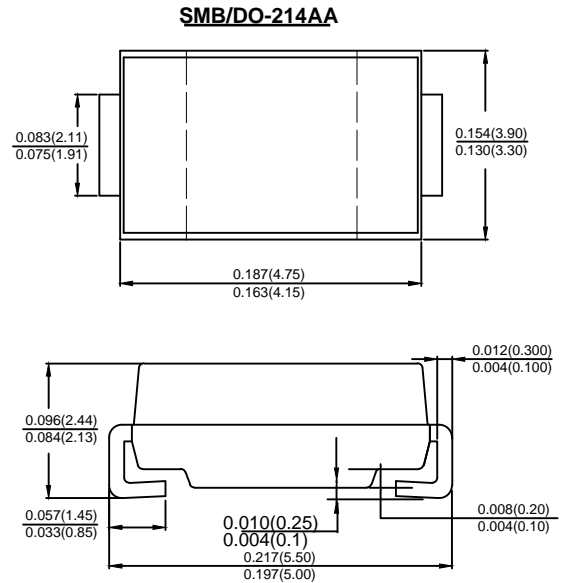
## 2.0AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

### Features

- Schottky Barrier Chip
- Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- Plastic Case Material has UL Flammability Classification Rating 94V-0

### Mechanical Data

- Case: Molded plastic SMB
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number



### 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	SYMBOL	SK 22	SK 23	SK 24	SK 245	SK 25	SK 26	SK 28	SK 210	SK 215	SK 220	SK 225	Unit	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	45	50	60	80	100	150	200	250	V	
Maximum RMS Voltage	$V_{RMS}$	14	21	28	31	35	42	56	70	105	140	175	V	
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	45	50	60	80	100	150	200	250	V	
Average Rectified Output Current @ $T_L = 100^\circ C$	$I_{F(AV)}$	2.0											A	
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50											A	
Forward Voltage @ $I_F = 2.0A$	$V_{FM}$	0.55			0.7		0.85		0.92		0.95		V	
Peak Reverse Current @ $T_A = 25^\circ C$	$I_R$	0.1						0.05						mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ C$		10						5						mA
$I^2t$ Rating for fusing ( $t < 8.3ms$ )	$I^2t$	10.37											A <sup>2</sup> s	
Typical Junction Capacitance (Note 2)	$C_J$	50											pF	
Typical Thermal Resistance per leg (Note 3)	$R_{\theta JA}$	95											°C/W	
Operating Temperature Range	$T_J$	-55 to +150											°C	
Storage Temperature Range	$T_{STG}$	-55 to +150											°C	

Note: 1. Pulse Test with PW=300usec, 1% Duty Cycle.

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

3. Thermal Resistance from Junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas.

AVERAGE FORWARD RECTIFIED CURRENT (A)

FIG.1 FORWARD CURRENT DERATING CURVE

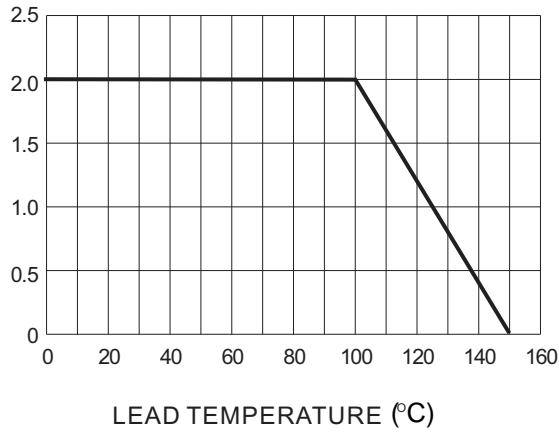


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

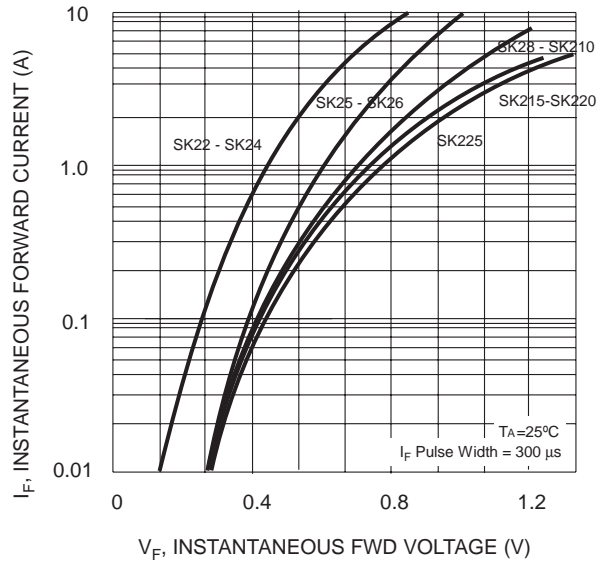


FIG.3 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

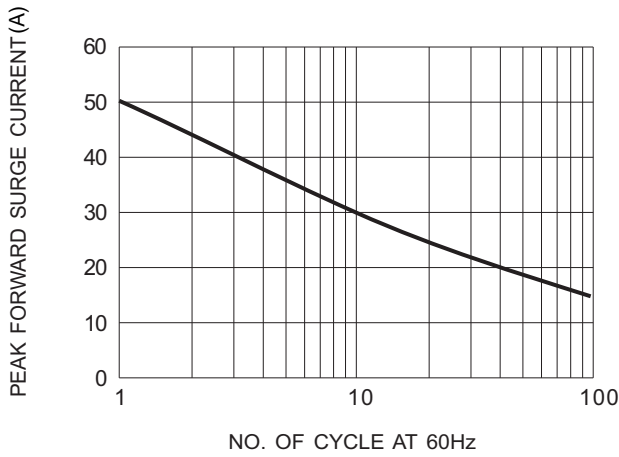


FIG.4 TYPICAL REVERSE CHARACTERISTIC

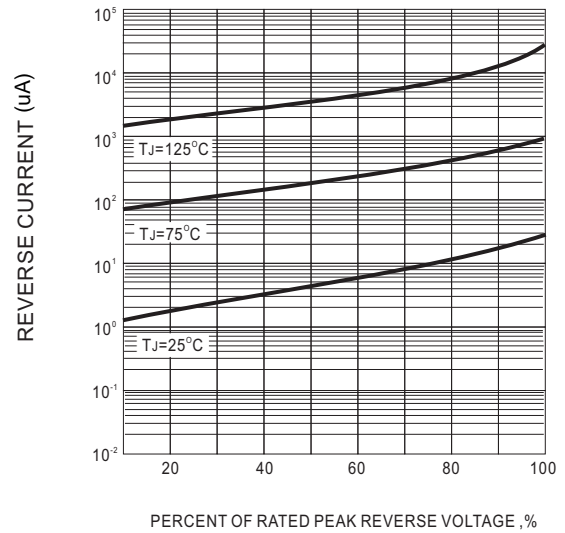
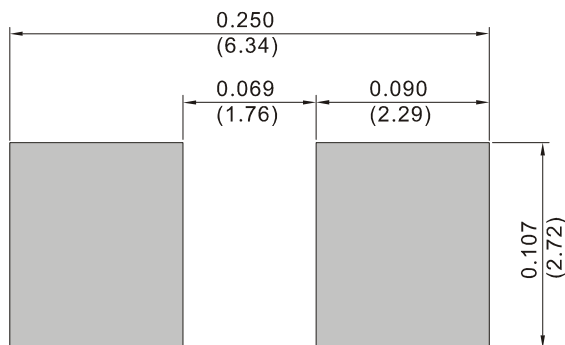


FIG.5 MOUNTING PAD LAYOUT



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