



SK22 THRU SK225

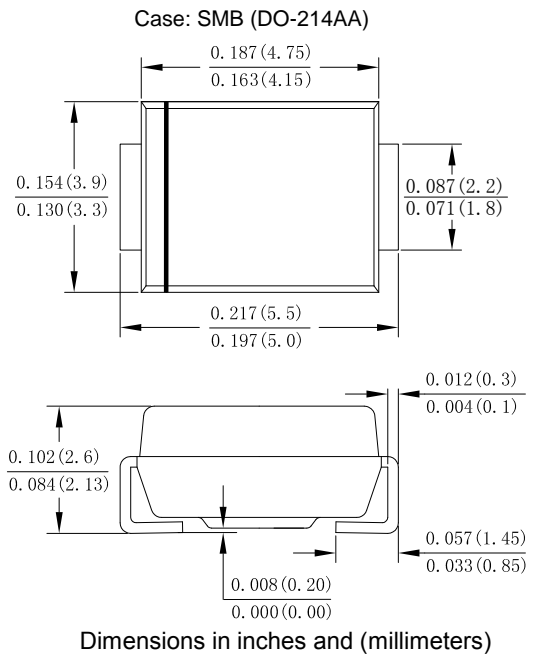
2.0 AMP Surface Mount Schottky Barrier Rectifiers

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 (Note 4)	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 @ $T_L = 100^\circ\text{C}$	$I_{F(AV)}$	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 @ $I_F = 2.0\text{A}$	V_{FM}	0.55			0.7			0.85		0.92		0.95		V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$	I_R	0.1						0.05						mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$		10						5						mA
I^2t Rating for fusing ($t < 8.3\text{ms}$)	I^2t	10.37											A^2s	
Typical Junction Capacitance (Note 2)	C_J	80						40						pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	95											$^\circ\text{C/W}$	
Operating Temperature Range	T_J	-55 to +150											$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-55 to +150											$^\circ\text{C}$	

Note: 1. Pulse Test with $PW = 300\mu\text{sec}$, 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.

4. "H": Halogen Free.



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FIG.1 FORWARD CURRENT DERATING CURVE

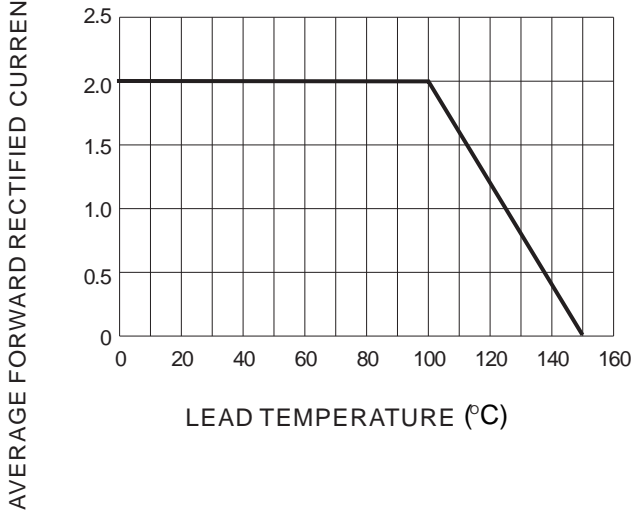


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

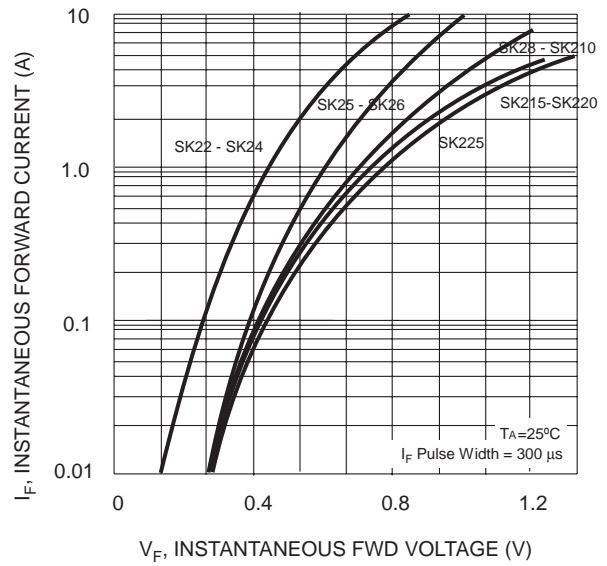


FIG.3 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

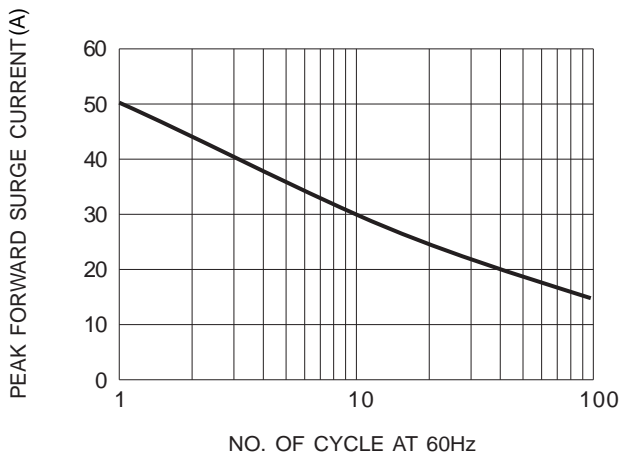


FIG.4 TYPICAL REVERSE CHARACTERISTIC

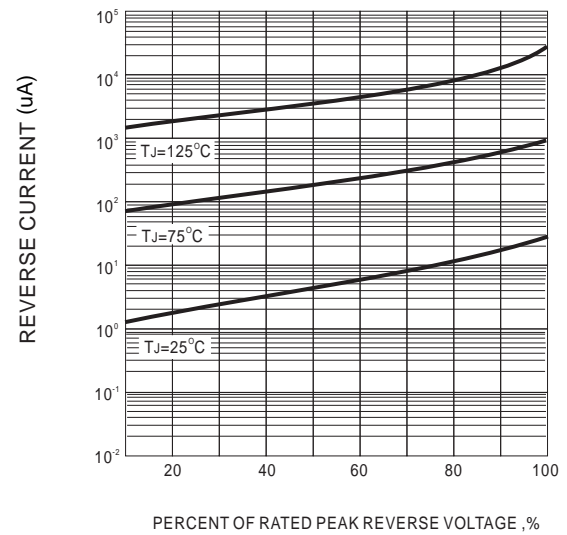
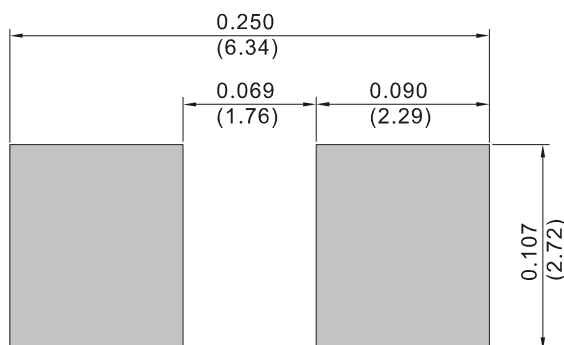


FIG.5 MOUNTING PAD LAYOUT





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