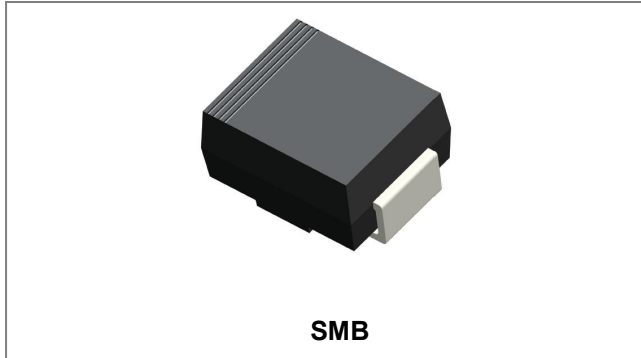


SK22 THRU SK210 SCHOTTKY RECTIFIER



Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: Low Profile Molded plastic
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band or cathode Notch
- Mounting Position: Any
- Weight: 0.09grams(approx)

Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	SK22	SK23	SK24	SK25	SK26	SK28	SK29	SK210	Units
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Working Peak Reverse Voltage	V_{RWM}									
DC Blocking Voltage	V_R									
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	64	71	V
Average Rectified Output Current @ $T_L=105^{\circ}\text{C}$	I_O	2.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50								A
Forward Voltage @ $I_O=2.0\text{ A}$	V_F	0.55		0.70		0.85				V
Peak Reverse Current @ $T_A=25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A=100^{\circ}\text{C}$	I_{RM}	0.5				20				mA
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	75								K/W
Operating Temperature Range	T_J	-65 to +125								$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150								$^{\circ}\text{C}$

Note: 1. mounted on P.C. Board with 8.0mm² copper pad areas.

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •

Ratings and Characteristics Curves

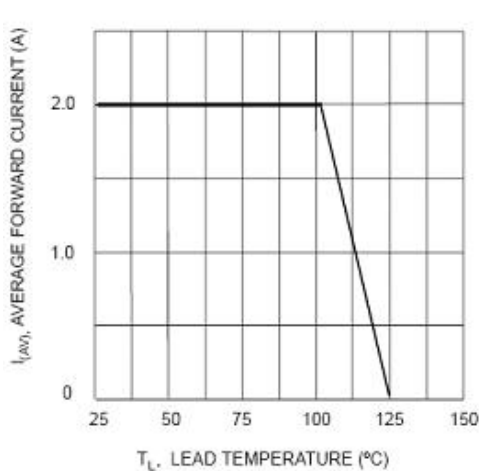


Fig. 1 Forward Current Derating Curve

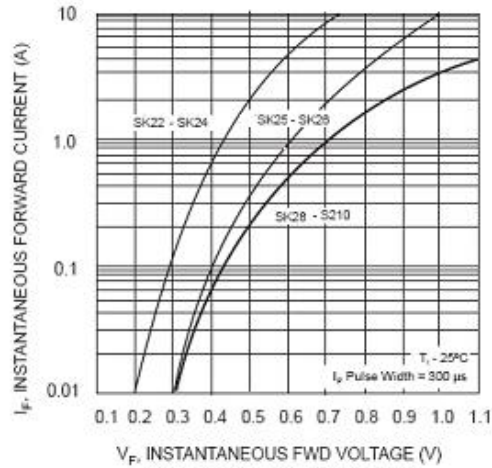


Fig. 2 Typ. Forward Characteristics

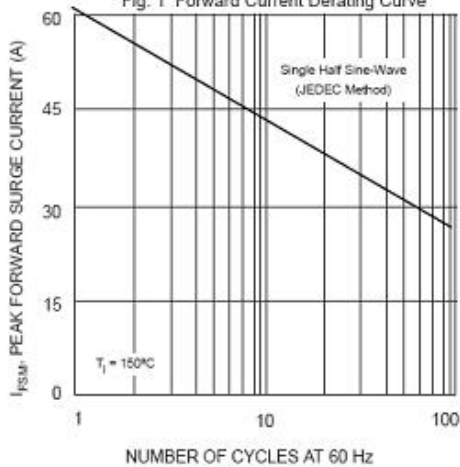


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

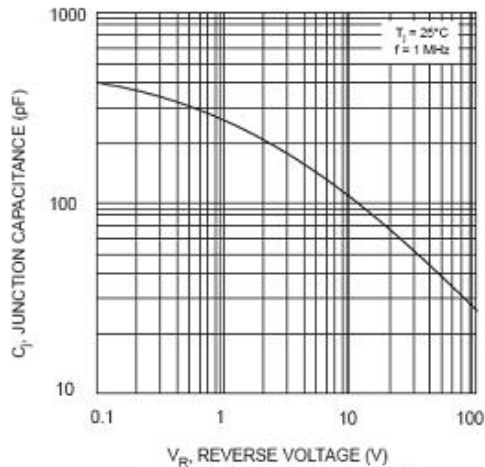


Fig. 4 Typical Junction Capacitance

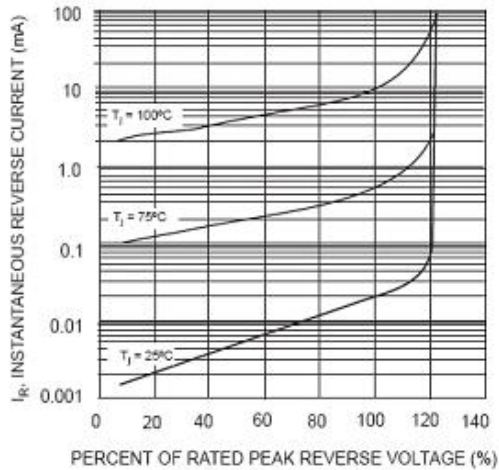
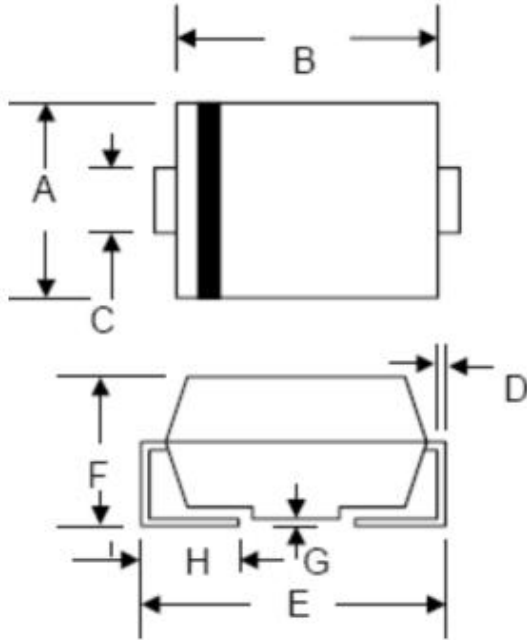


Fig. 5 Typical Reverse Characteristics

Mechanical Dimensions SMB



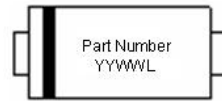
SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.30	3.94	0.130	0.155
B	4.06	4.70	0.160	0.185
C	1.80	2.20	0.071	0.087
D	0.152	0.305	0.006	0.012
E	4.80	5.59	0.189	0.220
F	2.10	2.60	0.083	0.102
G	0.051	0.203	0.002	0.008
H	0.76	1.52	0.030	0.060

Ordering Information

Device	Package	Shipping
SK22 THRU SK210	SMB (Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

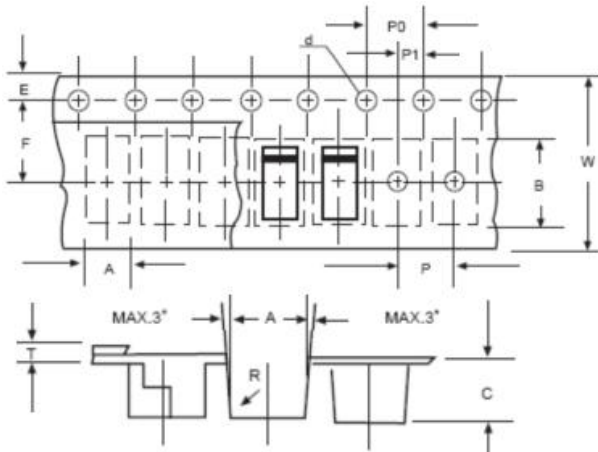
Marking Diagram



Where XXXXX is YYWWL

First row: Part Number (SK22, SK23, SK24, SK25, SK26, SK28, SK29, SK210)
Second row: YYWWL
YY is the manufacture year,
WW is the manufacture week code,
L is the wafer's Lot Number

Carrier Tape Specification SMB



SYMBOL	Millimeters	
	Min.	Max.
A	2.97	3.17
B	5.70	5.90
C	2.32	2.52
d	1.40	1.60
E	1.40	1.60
F	5.60	5.70
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
T	0.25	0.35
W	11.80	12.20

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