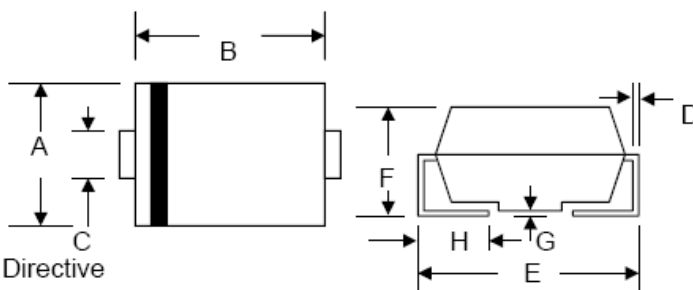


**Technical Data**  
**Data Sheet N0930, Rev. A**

*Green products*

**Features**

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 30A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-0
- Green Products in Compliance with the RoHS Directive
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

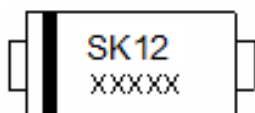


SMB/DO-214AA				
Dim	Min	Max	Min	Max
A	3.30	3.94	0.130	0.155
B	4.06	4.70	0.160	0.185
C	1.91	2.11	0.075	0.083
D	0.15	0.31	0.006	0.012
E	5.08	5.59	0.200	0.220
F	2.13	2.44	0.084	0.096
G	0.05	0.20	0.002	0.008
H	0.76	1.27	0.030	0.050
		In mm		In inch

**Mechanical Data**

- Case: Low Profile Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)

**Marking Diagram:**



Where XXXXX is YYWWL

- SK12 = Part Name
- YY = Year
- WW = Week
- L = Lot Number

**Cautions:** Molding resin  
Epoxy resin UL:94V-0

**Ordering Information:**

Device	Package	Shipping
SK12-SK110	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.

- China - Germany - Korea - Singapore - United States ●
- <http://www.smc-diodes.com> - [sales@smc-diodes.com](mailto:sales@smc-diodes.com) ●



**SK12-SK110**  
**1.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**

**Technical Data**  
**Data Sheet N0930, Rev. A**

**Green products**

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

Characteristic	Symbol	SK12	SK13	SK14	SK15	SK16	SK18	SK19	SK110	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	20	30	40	50	60	80	90	100	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	64	71	V
Average Rectified Output Current @ $T_L = 75^\circ\text{C}$	$I_O$	1.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30								A
Forward Voltage @ $I_O = 1.0\text{ A}$	$V_F$	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)	$R_{\theta JA}$	95								K/W
Operating Temperature Range	$T_J$	-55 to +125								$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150								$^\circ\text{C}$

Note: 1. mounted on P.C. Board with  $0.5\text{mm}^2$  copper pad areas.

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**Technical Data**  
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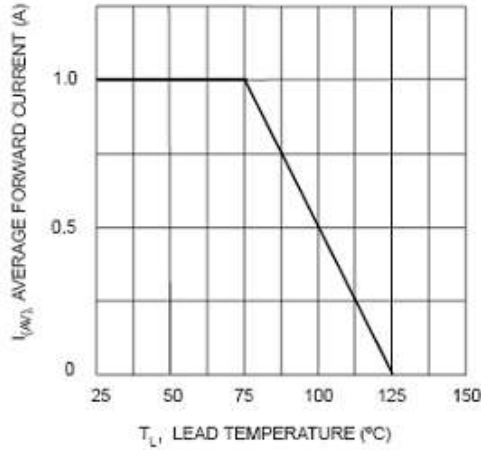


Fig. 1 Forward Current Derating Curve

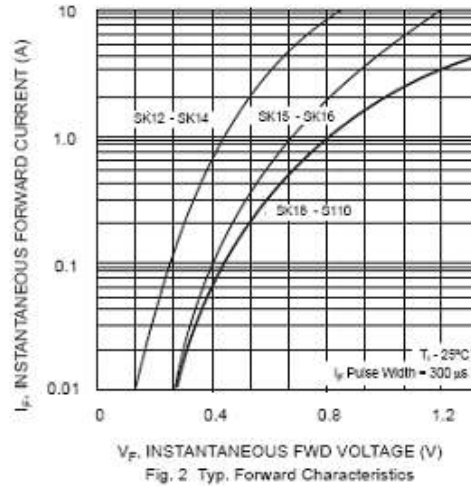


Fig. 2 Typ. Forward Characteristics

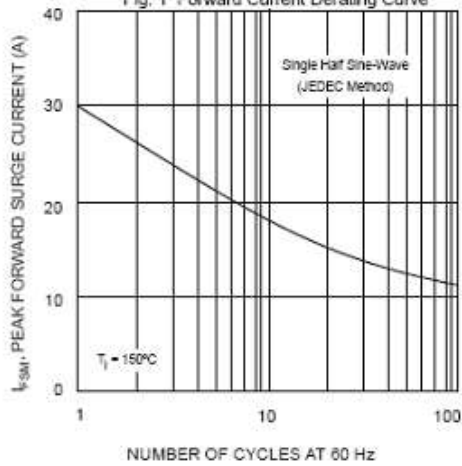


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

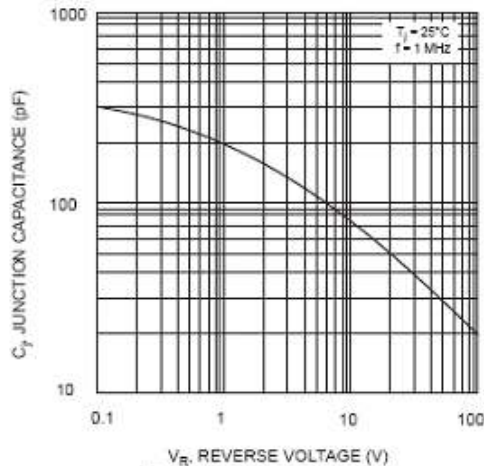


Fig. 4 Typical Junction Capacitance

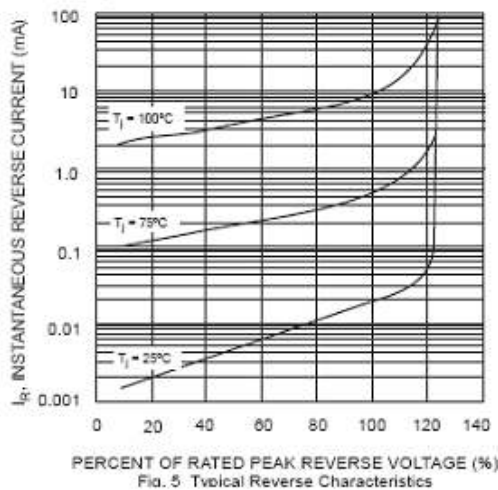


Fig. 5 Typical Reverse Characteristics

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