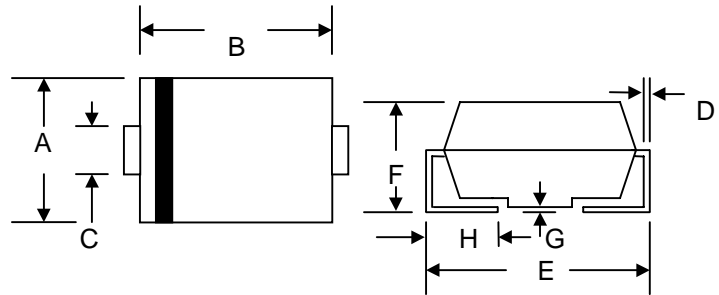


## 1.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### 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-O



### 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.)

SMB/DO-214AA		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	2.11
D	0.152	0.305
E	5.08	5.59
F	2.13	2.44
G	0.051	0.203
H	0.76	1.27
All Dimensions in mm		

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

Characteristic	Symbol	SK12	SK13	SK14	SK15	SK16	SK18	SK19	S110	Unit	
Peak Repetitive Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	90	100	V	
Working Peak Reverse Voltage	$V_{RWM}$										
DC Blocking Voltage	$V_R$										
RMS Reverse Voltage	$V_{R(RMS)}$	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 @ $I_F = 1.0\text{A}$	$V_{FM}$	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					mA
						20					
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	95								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 5.0mm<sup>2</sup> copper pad areas

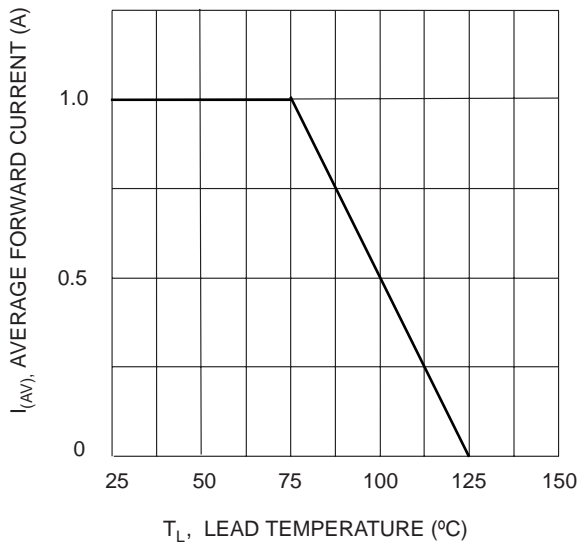


Fig. 1 Forward Current Derating Curve

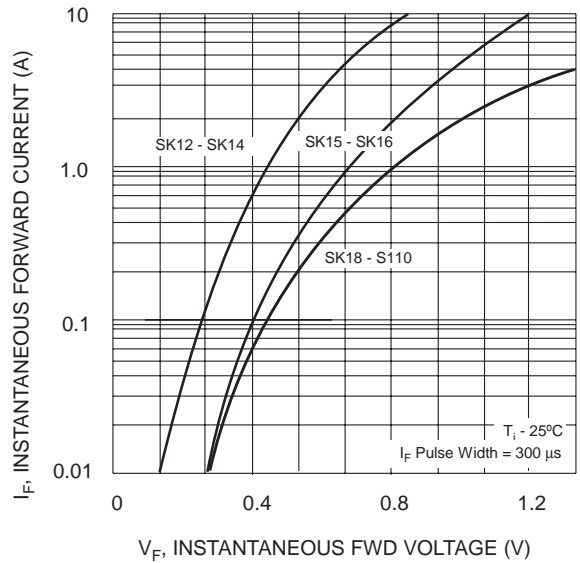


Fig. 2 Typ. Forward Characteristics

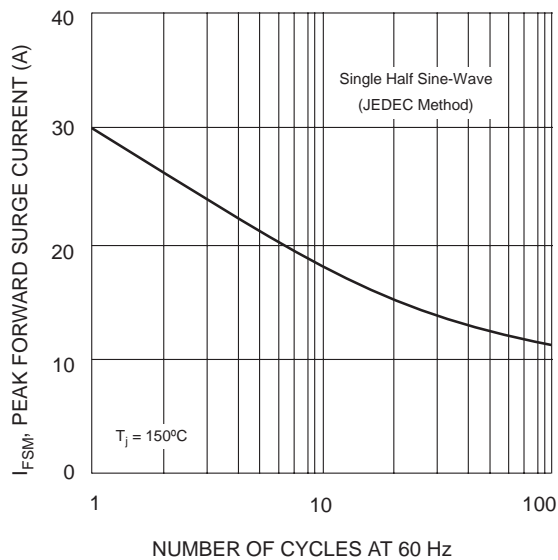


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

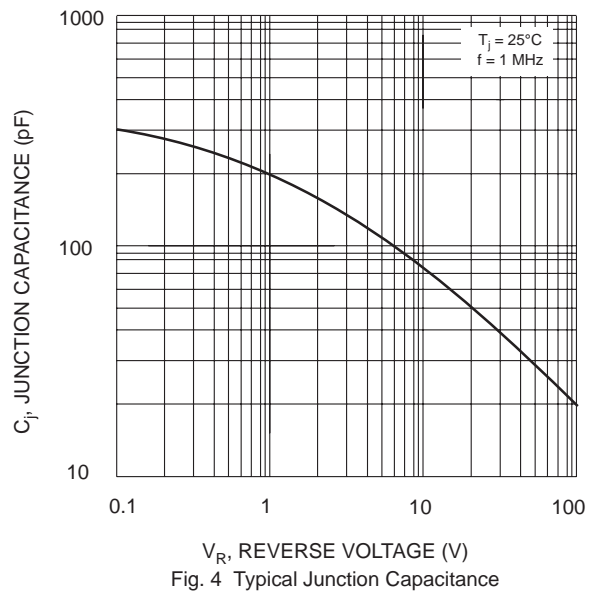


Fig. 4 Typical Junction Capacitance

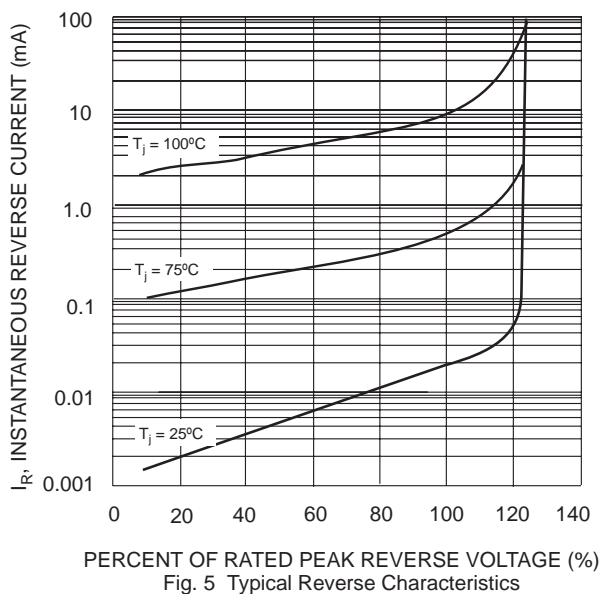


Fig. 5 Typical Reverse Characteristics

## ORDERING INFORMATION

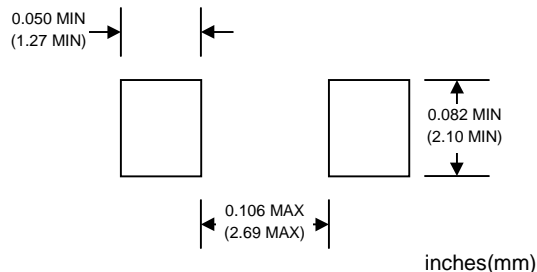
Product No.♦	Package Type	Shipping Quantity
SK12-T1	SMB	500/Tape & Reel
<b>SK12-T3</b>	SMB	3000/Tape & Reel
SK13-T1	SMB	500/Tape & Reel
<b>SK13-T3</b>	SMB	3000/Tape & Reel
SK14-T1	SMB	500/Tape & Reel
<b>SK14-T3</b>	SMB	3000/Tape & Reel
SK15-T1	SMB	500/Tape & Reel
<b>SK15-T3</b>	SMB	3000/Tape & Reel
SK16-T1	SMB	500/Tape & Reel
<b>SK16-T3</b>	SMB	3000/Tape & Reel
SK18-T1	SMB	500/Tape & Reel
<b>SK18-T3</b>	SMB	3000/Tape & Reel
SK19-T1	SMB	500/Tape & Reel
<b>SK19-T3</b>	SMB	3000/Tape & Reel
S110-T1	SMB	500/Tape & Reel
<b>S110-T3</b>	SMB	3000/Tape & Reel

Products listed in **bold** are WTE Preferred devices.

♦T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

## RECOMMENDED FOOTPRINT



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