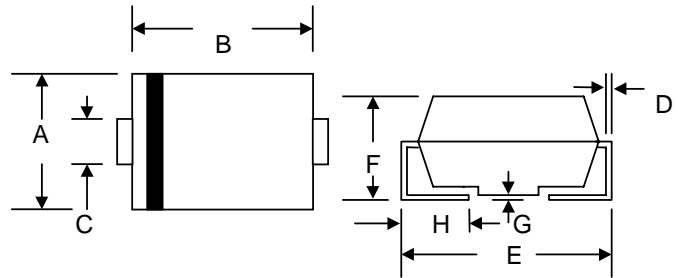


## 1.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### 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: 0.064 grams (approx.)

SMA/DO-214AC		
Dim	Min	Max
A	2.50	2.90
B	4.00	4.60
C	1.40	1.60
D	0.152	0.305
E	4.80	5.28
F	2.00	2.44
G	0.051	0.203
H	0.76	1.52
All Dimensions in mm		

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

Characteristic	Symbol	SS12	SS13	SS14	SS15	SS16	SS18	SS19	S100	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	
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					20				mA
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	88								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

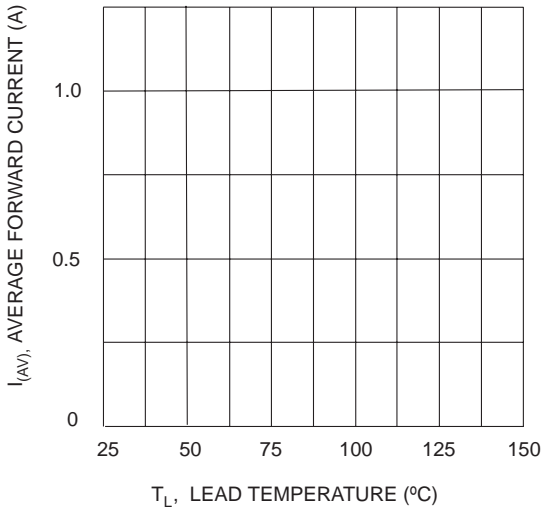


Fig. 1 Forward Current Derating Curve

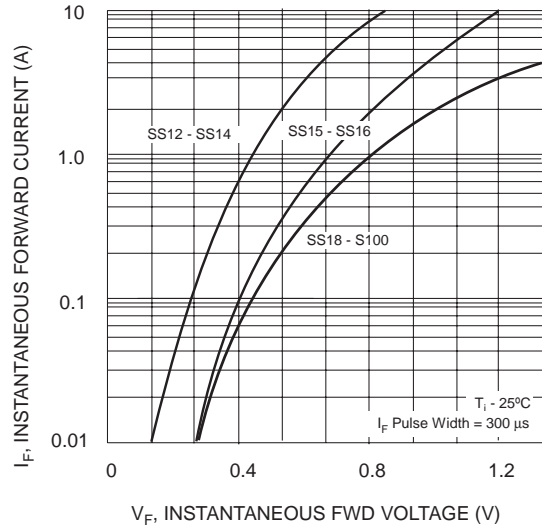


Fig. 2 Typ. Forward Characteristics

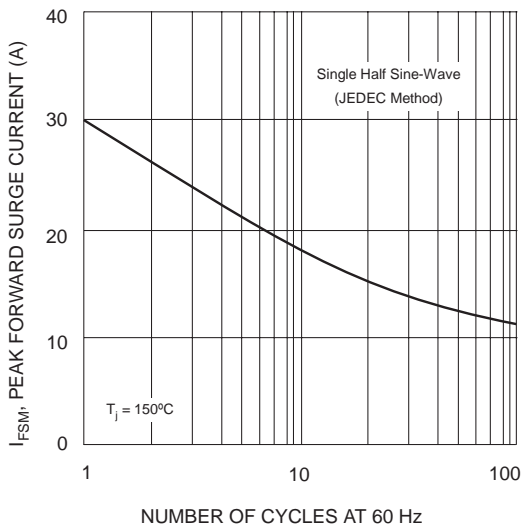


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

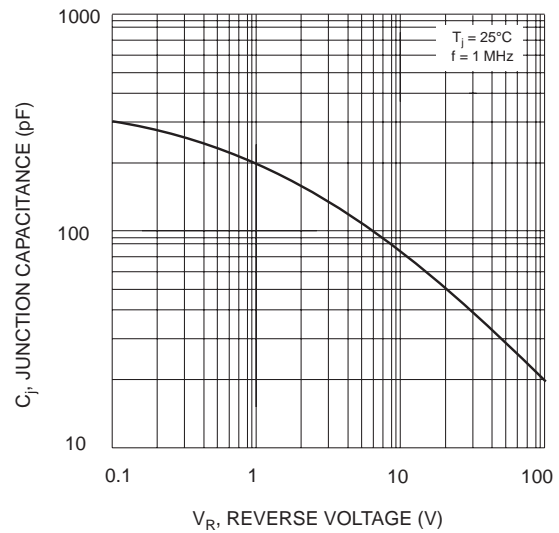


Fig. 4 Typical Junction Capacitance

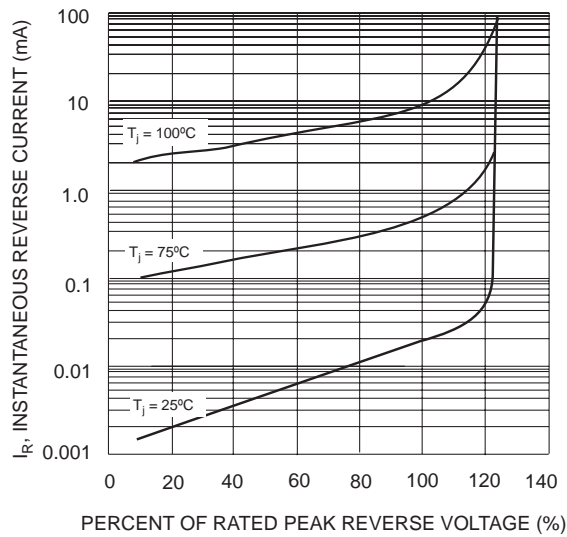


Fig. 5 Typical Reverse Characteristics

## ORDERING INFORMATION

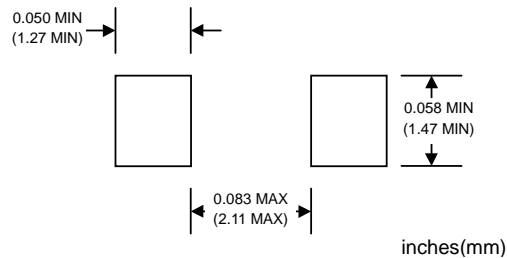
Product No.♦	Package Type	Shipping Quantity
SS12-T1	SMA	1800/Tape & Reel
<b>SS12-T3</b>	SMA	7500/Tape & Reel
SS13-T1	SMA	1800/Tape & Reel
<b>SS13-T3</b>	SMA	7500/Tape & Reel
SS14-T1	SMA	1800/Tape & Reel
<b>SS14-T3</b>	SMA	7500/Tape & Reel
SS15-T1	SMA	1800/Tape & Reel
<b>SS15-T3</b>	SMA	7500/Tape & Reel
SS16-T1	SMA	1800/Tape & Reel
<b>SS16-T3</b>	SMA	7500/Tape & Reel
SS18-T1	SMA	1800/Tape & Reel
<b>SS18-T3</b>	SMA	7500/Tape & Reel
SS19-T1	SMA	1800/Tape & Reel
<b>SS19-T3</b>	SMA	7500/Tape & Reel
S100-T1	SMA	1800/Tape & Reel
<b>S100-T3</b>	SMA	7500/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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**Internet:** http://www.wontop.com

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