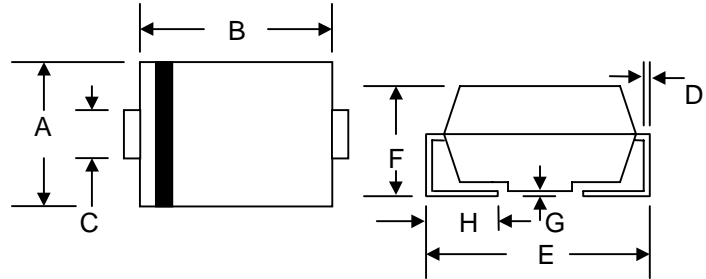


## 1.0A SURFACE MOUNT SCHOTTKY BARRIER DIODE

### 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: SMA/DO-214AC, 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.)
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

SMA/DO-214AC		
Dim	Min	Max
A	2.50	2.90
B	4.00	4.60
C	1.20	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 @<sub>T<sub>A</sub></sub>=25°C unless otherwise specified

Characteristic	Symbol	SS12	SS13	SS14	SS15	SS16	SS18	SS19	S100	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	90	100	V
Working Peak Reverse Voltage	V <sub>RWM</sub>									
DC Blocking Voltage	V <sub>R</sub>									
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	28	35	42	56	64	71	V
Average Rectified Output Current @ <sub>T<sub>L</sub></sub> = 75°C	I <sub>O</sub>	1.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30								A
Forward Voltage @ <sub>I<sub>F</sub></sub> = 1.0A	V <sub>FM</sub>	0.50		0.70		0.85				V
Peak Reverse Current @ <sub>T<sub>A</sub></sub> = 25°C	I <sub>RM</sub>	0.5								mA
At Rated DC Blocking Voltage @ <sub>T<sub>A</sub></sub> = 100°C		20								
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub> R <sub>θJA</sub>	28 88								°C/W
Operating Temperature Range	T <sub>j</sub>	-65 to +125								°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150								°C

Note: 1. Mounted on P.C. Board with 5.0mm<sup>2</sup> copper pad area.

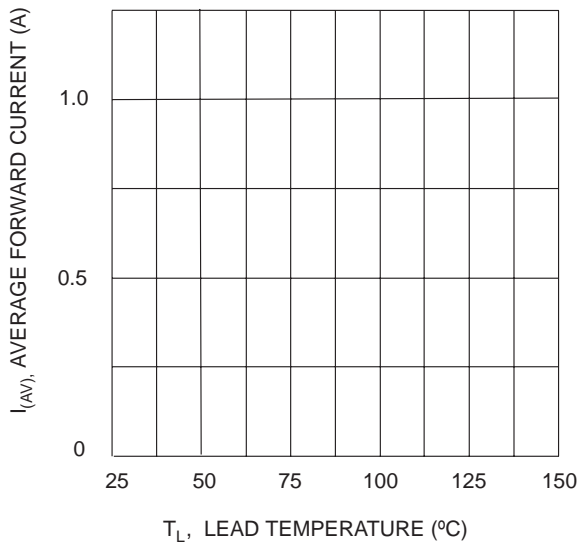


Fig. 1 Forward Current Derating Curve

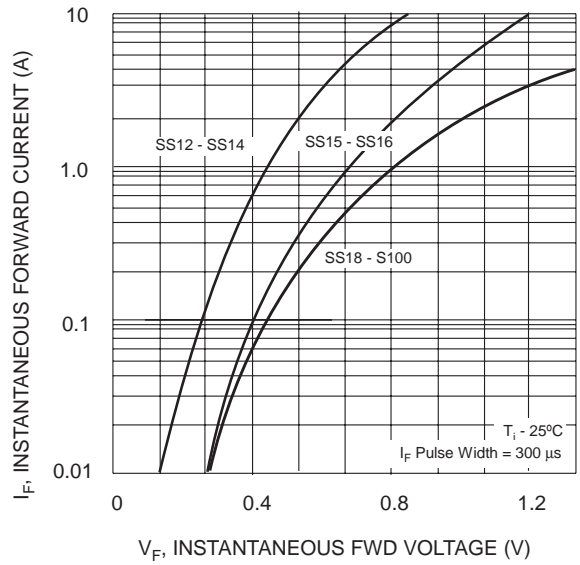


Fig. 2 Typ. Forward Characteristics

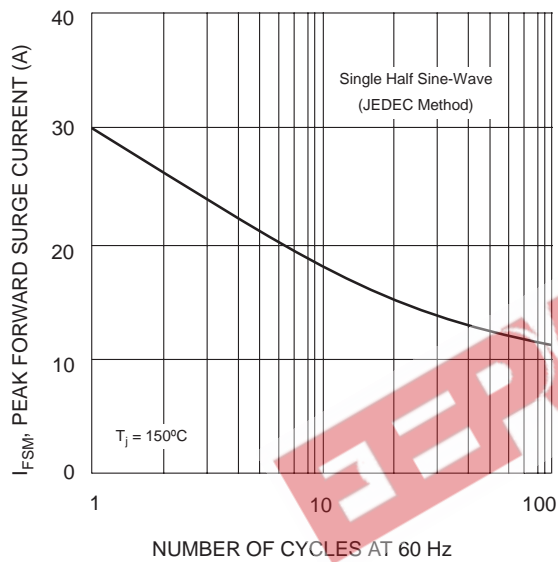


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

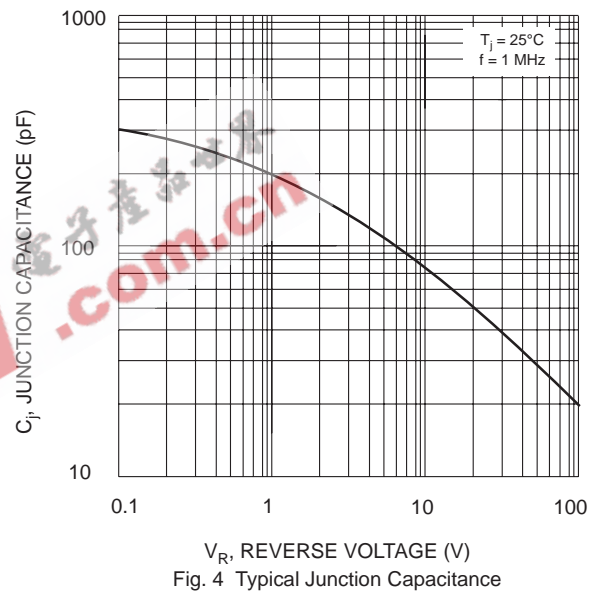


Fig. 4 Typical Junction Capacitance

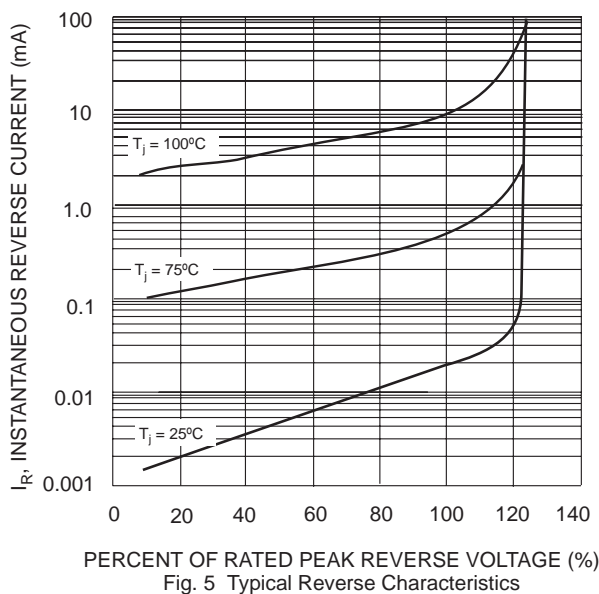


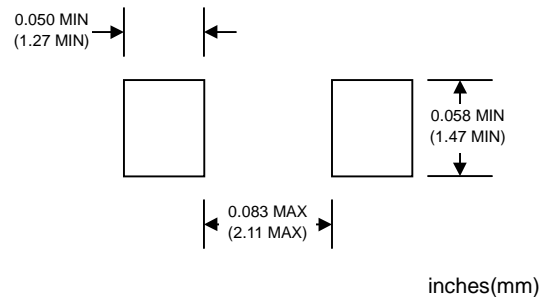
Fig. 5 Typical Reverse Characteristics

## MARKING INFORMATION



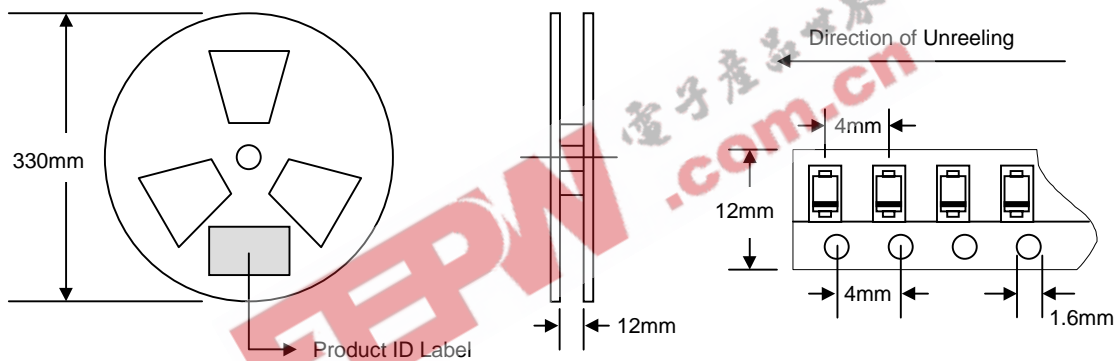
Cathode = Polarity Band  
 WTE = Manufacturer's Logo  
 SS1x = Device Number Except S100  
 x = 2, 3, 4, 5, 6, 8 or 9

## RECOMMENDED FOOTPRINT



## PACKAGING INFORMATION

### TAPE & REEL



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
330	7,500	340 x 337 x 45	15,000	370 x 370 x 420	120,000	17.5

**Note:** 1. Paper reel, white or gray color.  
 2. Components are packed in accordance with EIA standard 481-1 and 481-2.

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SS12-T3	SMA	7500/Tape & Reel
SS13-T3	SMA	7500/Tape & Reel
SS14-T3	SMA	7500/Tape & Reel
SS15-T3	SMA	7500/Tape & Reel
SS16-T3	SMA	7500/Tape & Reel
SS18-T3	SMA	7500/Tape & Reel
SS19-T3	SMA	7500/Tape & Reel
S100-T3	SMA	7500/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, SS12-T3-LF.**

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