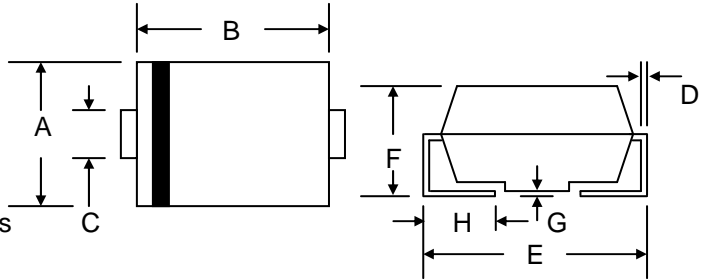


### Features

- Low Forward Voltage
- Epitaxial Construction with Oxide Passivation
- Guard Ring for Transient and ESD Protection
- Surge Overload Rating to 80A Peak
- Low Power Loss
- Fast Switching
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes



### Mechanical Data

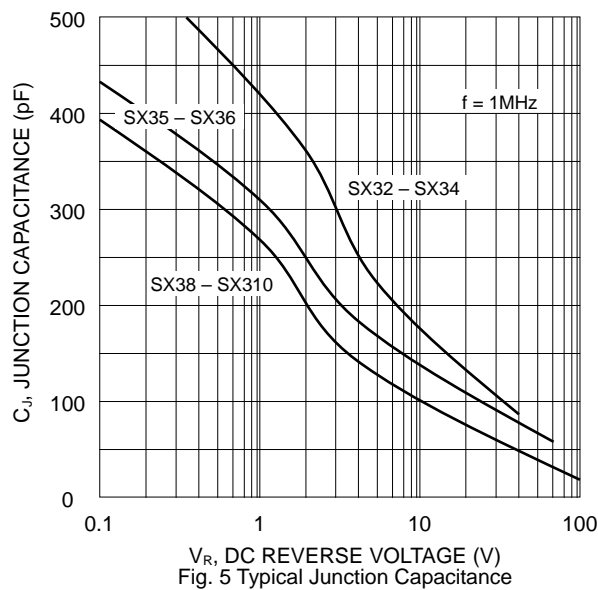
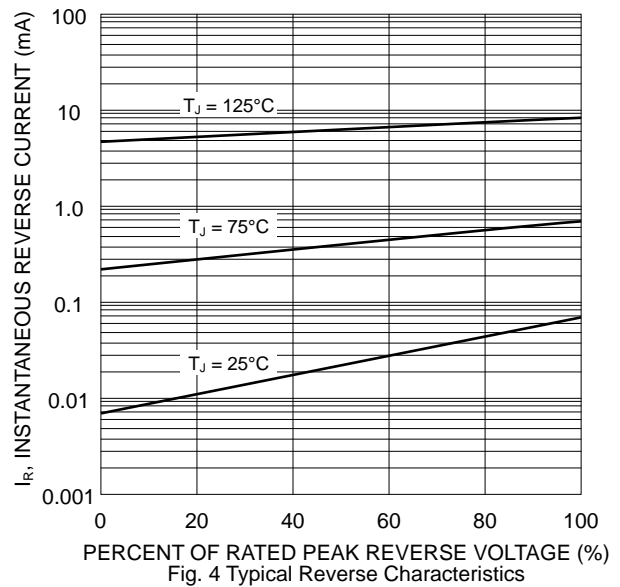
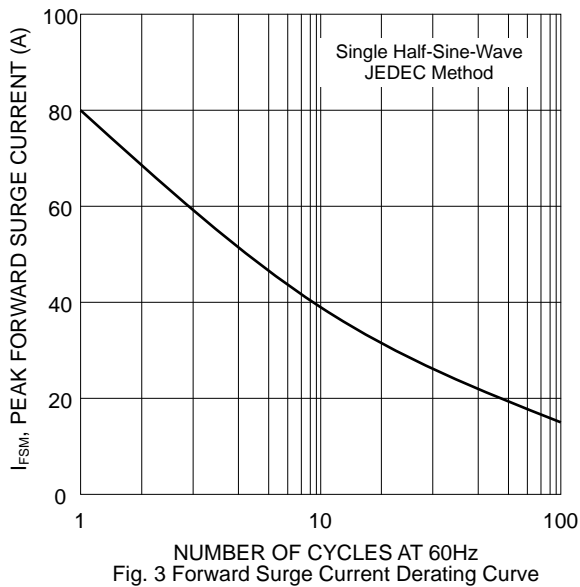
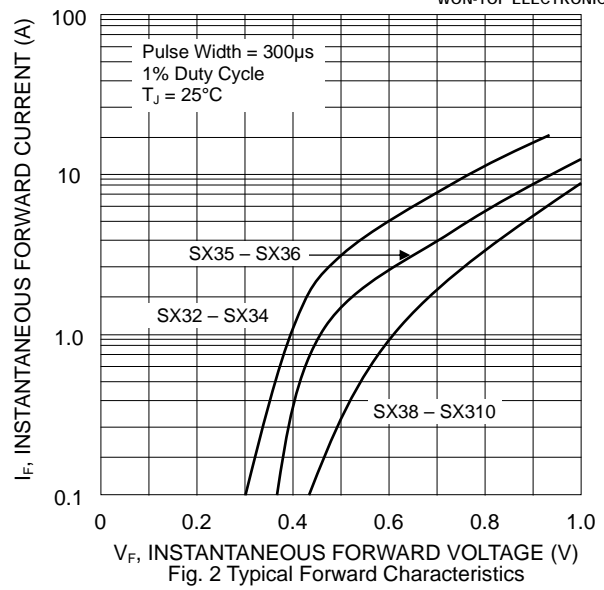
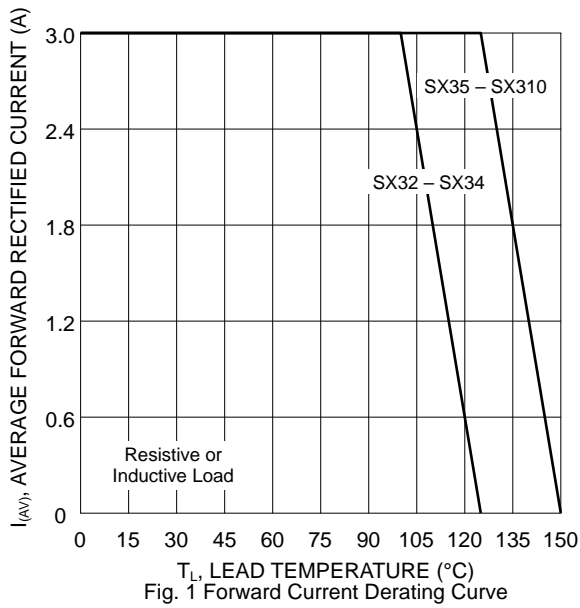
- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

SMA/DO-214AC		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.90
D	0.152	0.305
E	4.80	5.30
F	2.00	2.44
G	0.051	0.203
H	0.76	1.52
All Dimensions in mm		

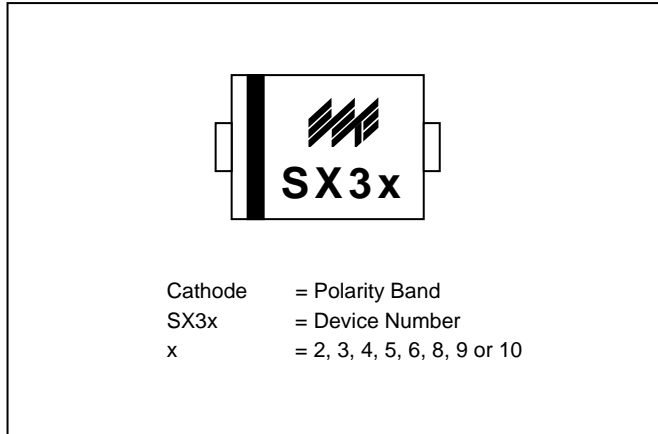
### Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	SX32	SX33	SX34	SX35	SX36	SX38	SX39	SX310	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	63	70	V	
Average Rectified Output Current (Note 1)	$I_O$	3.0								A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	80								A	
Forward Voltage @ $I_F = 3.0\text{A}$	$V_{FM}$	0.50			0.75		0.85			V	
Peak Reverse Current @ $T_J = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J = 100^\circ\text{C}$	$I_{RM}$					0.5					mA
						20					
Typical Junction Capacitance (Note 2)	$C_J$	250			180		140			pF	
Thermal Resistance, Junction to Ambient (Note 1)	$R_{JA}$					80					$^\circ\text{C/W}$
Thermal Resistance, Junction to Lead (Note 1)	$R_{JL}$					22					
Operating Temperature Range	$T_J$	-55 to +125			-55 to +150					$^\circ\text{C}$	
Storage Temperature Range	$T_{STG}$	-55 to +150								$^\circ\text{C}$	

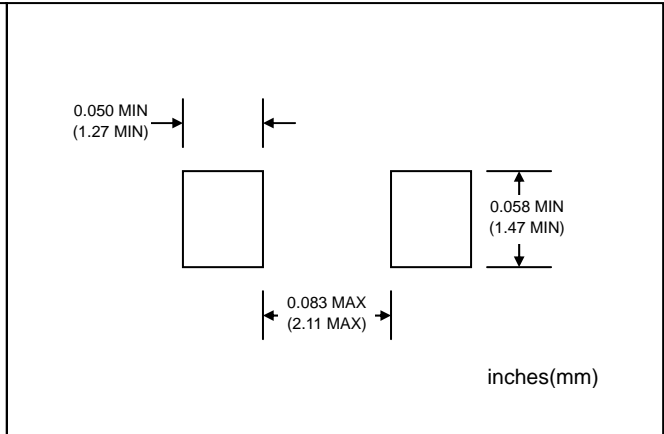
Note: 1. Mounted on FR-4 PCB with 5.0 x 5.0mm copper pads.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



## MARKING INFORMATION

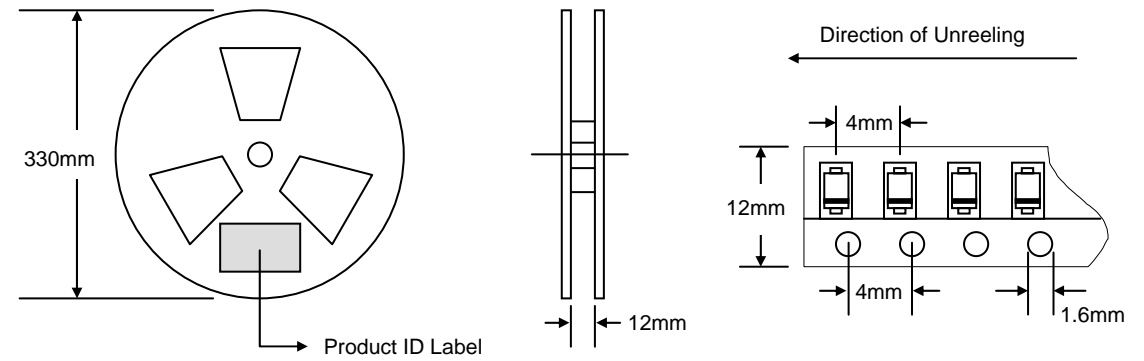


## RECOMMENDED FOOTPRINT



## 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	5,000	340 x 337 x 45	10,000	370 x 370 x 420	80,000	14.0


**Note:**

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

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
SX32-T3	SMA	5000/Tape & Reel
SX33-T3	SMA	5000/Tape & Reel
SX34-T3	SMA	5000/Tape & Reel
SX35-T3	SMA	5000/Tape & Reel
SX36-T3	SMA	5000/Tape & Reel
SX38-T3	SMA	5000/Tape & Reel
SX39-T3	SMA	5000/Tape & Reel
SX310-T3	SMA	5000/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, SX32-T3-LF.**

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**WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT.** WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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