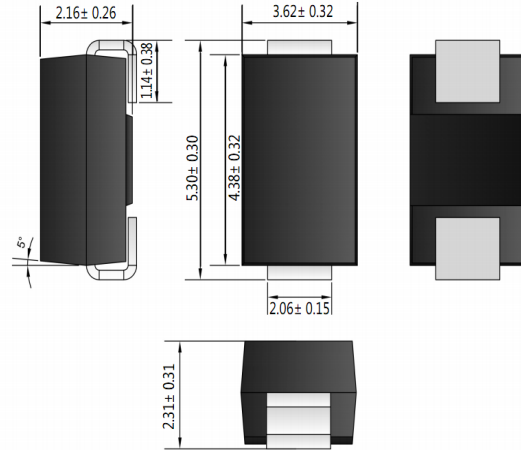


### Features

- Low Forward Voltage
- Epitaxial Construction with Oxide Passivation
- Guard Ring for Transient and ESD Protection
- Surge Overload Rating to 125A Peak
- Low Power Loss
- Fast Switching
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes

### SMB /DO-214AA



### Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Device Code, See Page 3
- Weight: 0.093 grams (approx.)
- **Lead Free: For RoHS / Lead Free Version**

### Maximum Ratings @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	SR5150	SR5200	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	150	200	V
Working Peak Reverse Voltage	V <sub>RWM</sub>			
DC Blocking Voltage	V <sub>R</sub>			
RMS Reverse Voltage	V <sub>R(RMS)</sub>	105	140	V
Average Rectified Output Current (Note 1)	I <sub>O</sub>	5.0		A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	125		A
Forward Voltage @ I <sub>F</sub> = 5.0A	V <sub>FM</sub>	0.92		V
Peak Reverse Current @ T <sub>J</sub> = 25°C	I <sub>RM</sub>	0.2		mA
At Rated DC Blocking Voltage @ T <sub>J</sub> = 100°C		5.0		
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	120		pF
Thermal Resistance, Junction to Ambient (Note 1)	R <sub>JA</sub>	70		°C/W
Thermal Resistance, Junction to Lead (Note 1)	R <sub>JL</sub>	18		
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150		°C

Note: 1. Mounted on FR-4 PCB with 8.0 x 8.0mm copper pads.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

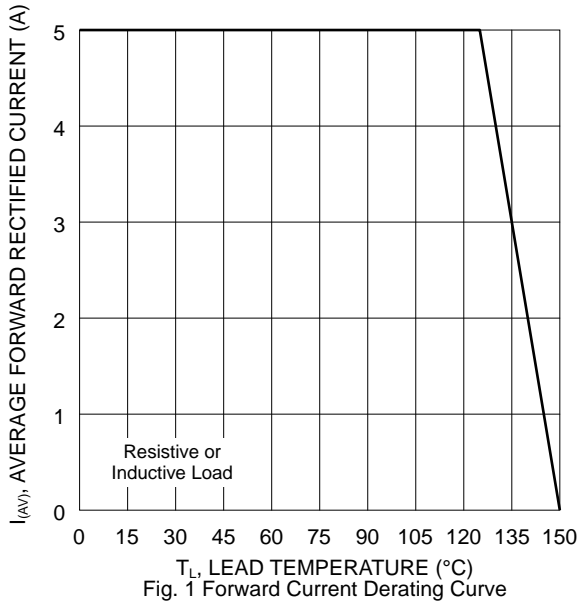


Fig. 1 Forward Current Derating Curve

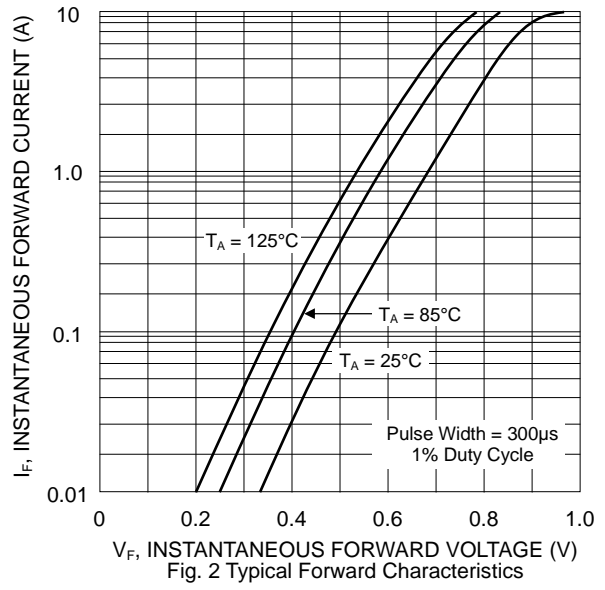


Fig. 2 Typical Forward Characteristics

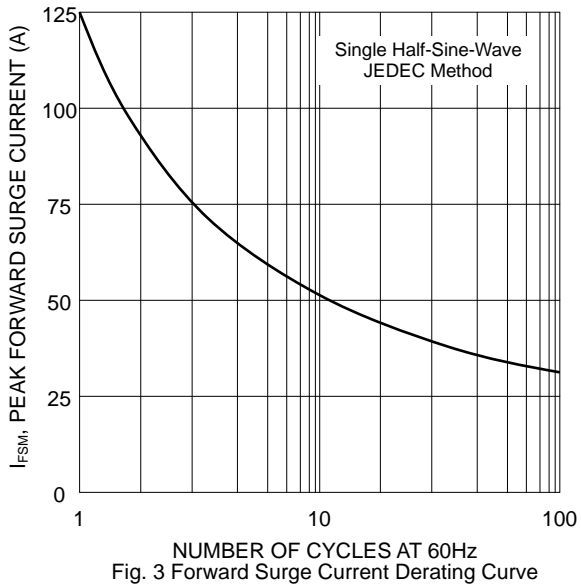


Fig. 3 Forward Surge Current Derating Curve

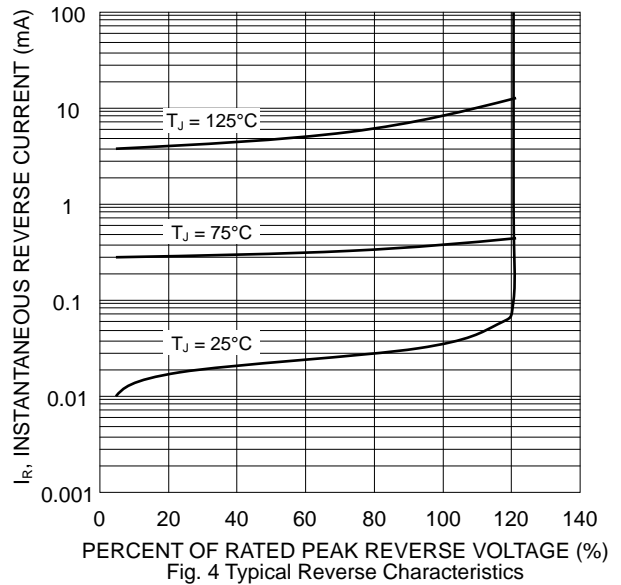


Fig. 4 Typical Reverse Characteristics

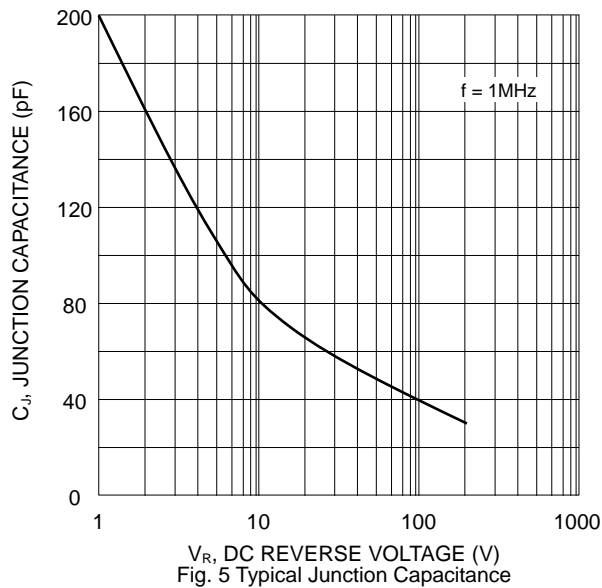
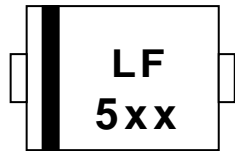


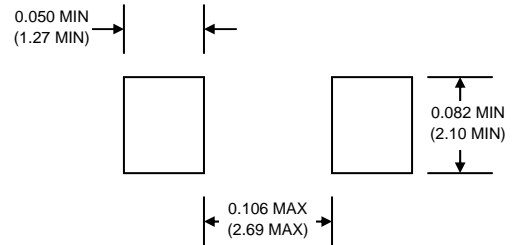
Fig. 5 Typical Junction Capacitance

## MARKING INFORMATION



Cathode = Polarity Band  
 5xx = Device Number  
 xx = 150 or 200

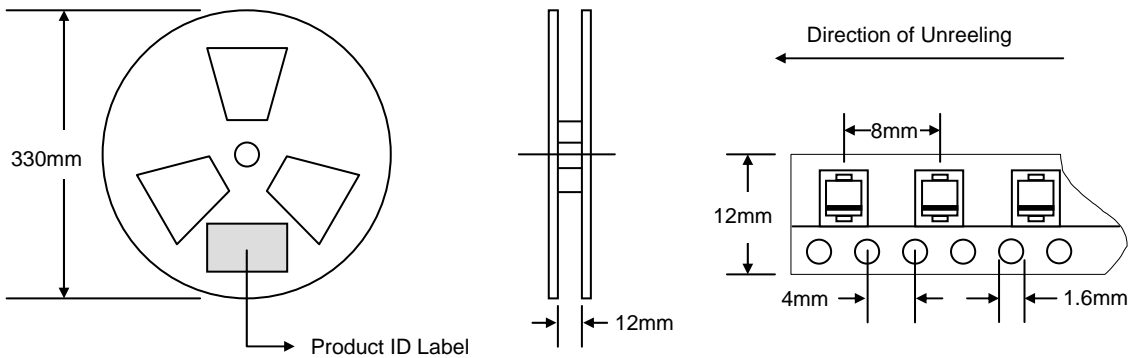
## RECOMMENDED FOOTPRINT



inches(mm)

## 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	3,000	340 x 337 x 45	6,000	370 x 370 x 420	48,000	14.0