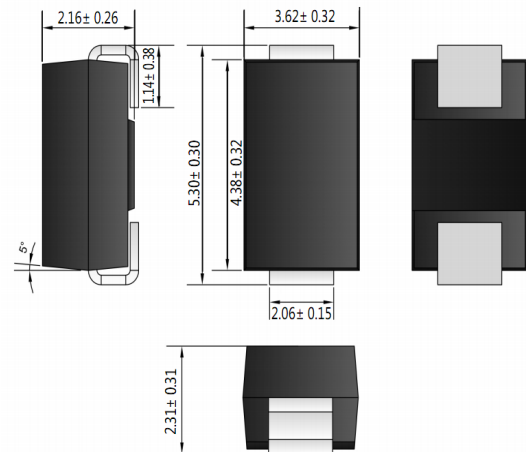


Features

- Low Forward Voltage
- Epitaxial Construction with Oxide Passivation
- Guard Ring for Transient and ESD Protection
- Surge Overload Rating to 50A Peak
- Low Power Loss
- Fast Switching
- Ideally Suited for Use in High Frequency SMPS, Inverters and As Free Wheeling Diodes

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: Type Number
- Weight: 0.093 grams (approx.)
- **Lead Free: For RoHS / Lead Free Version**

SMB /DO-214AA

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

Characteristic	Symbol	SK22	SK23	SK24	SK25	SK26	SK28	SK29	S210	Unit	
Peak Repetitive Reverse Voltage	V_{RRM}										
Working Peak Reverse Voltage	V_{RWM}	20	30	40	50	60	80	90	100	V	
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	2.0								A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50								A	
Forward Voltage @ $I_F = 2.0\text{A}$	V_{FM}	0.50			0.70		0.85			V	
Peak Reverse Current @ $T_J = 25^\circ\text{C}$	I_{RM}	0.5								mA	
At Rated DC Blocking Voltage @ $T_J = 100^\circ\text{C}$		10									
Typical Junction Capacitance (Note 2)	C_J	150					100				pF
Thermal Resistance, Junction to Ambient (Note 1)	R_{JA}	80								$^\circ\text{C/W}$	
Thermal Resistance, Junction to Lead (Note 1)	R_{JL}	24									
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 8.0 x 8.0mm copper pads.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

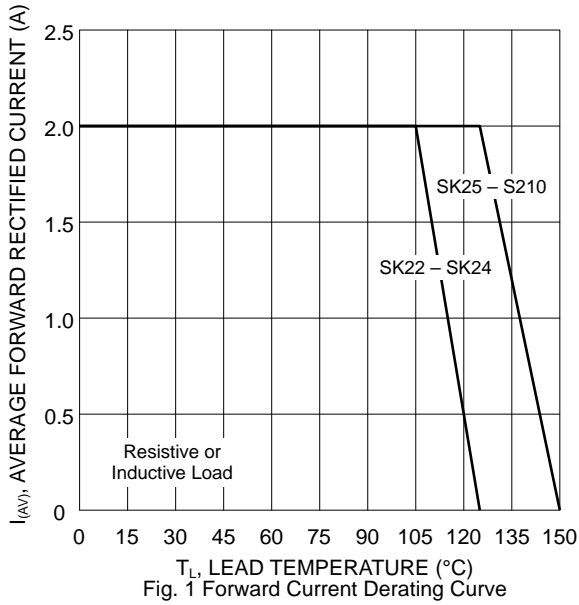


Fig. 1 Forward Current Derating Curve

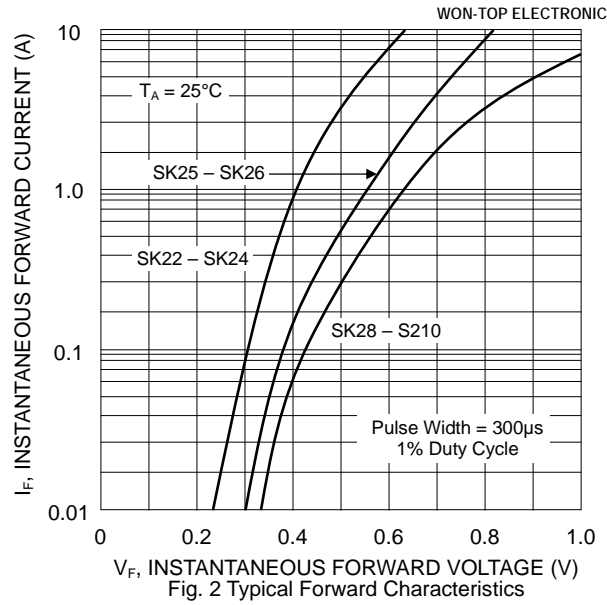


Fig. 2 Typical Forward Characteristics

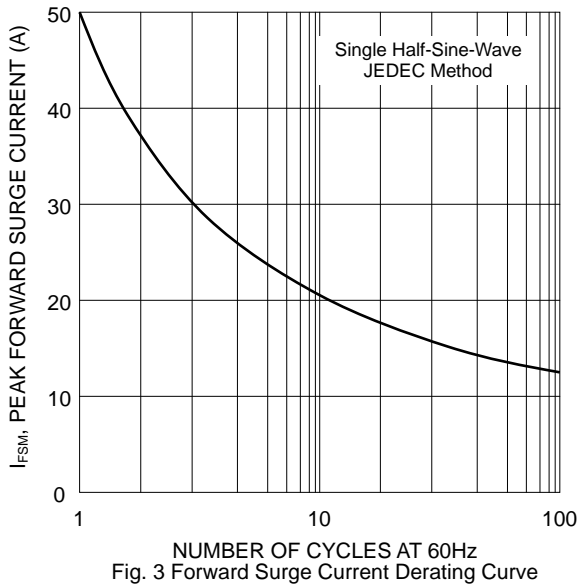


Fig. 3 Forward Surge Current Derating Curve

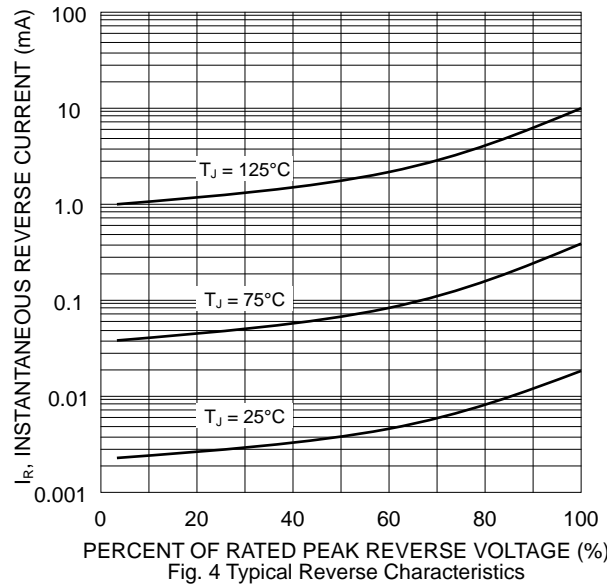


Fig. 4 Typical Reverse Characteristics

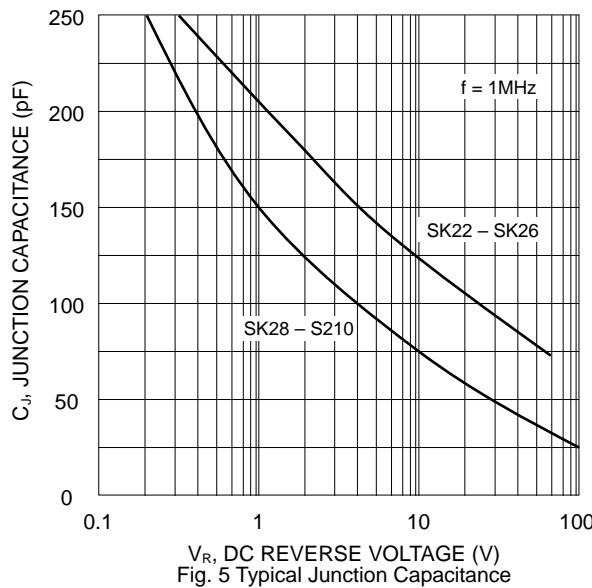


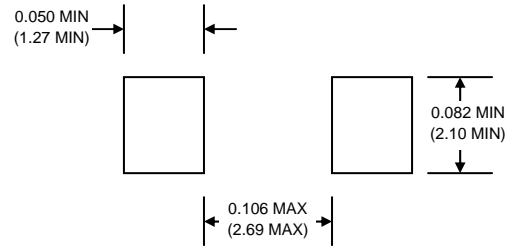
Fig. 5 Typical Junction Capacitance

MARKING INFORMATION



Cathode = Polarity Band
 SK2x = Device Number Except S210
 x = 2, 3, 4, 5, 6, 8 or 9

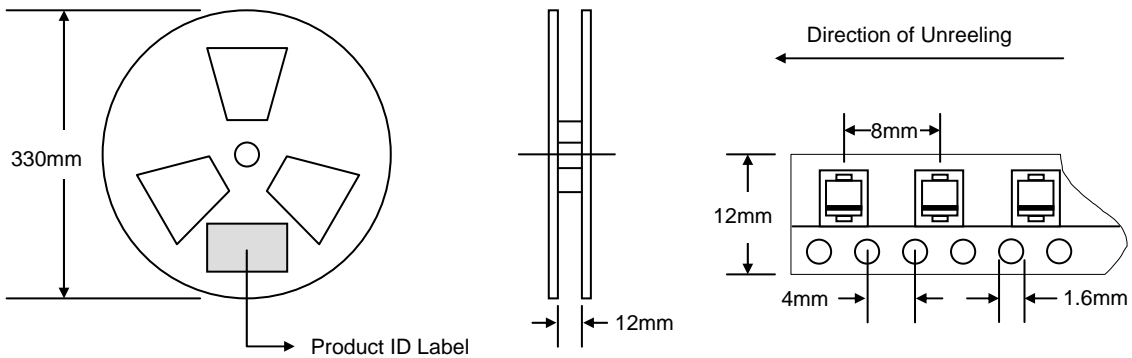
RECOMMENDED FOOTPRINT



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