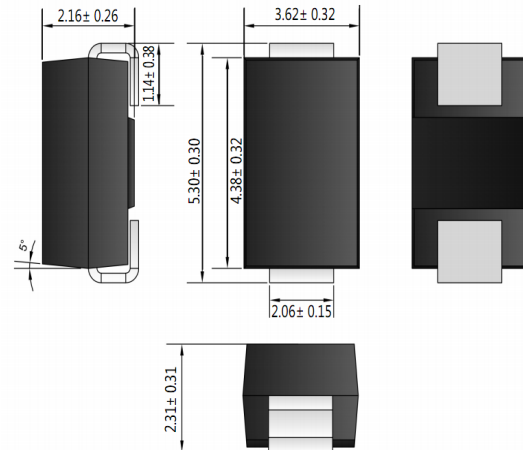


Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Surge Overload Rating to 50A Peak
- Low Power Loss
- Super-Fast Recovery Time
- 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 and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	ER2A	ER2B	ER2C	ER2D	ER2E	ER2G	ER2J	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	210	280	420	V
Average Rectified Output Current @ $T_L = 110^{\circ}\text{C}$	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}	0.95				1.25		1.7	V
Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^{\circ}\text{C}$	I_{RM}	10				350			μA
Reverse Recovery Time (Note 1)	t_{rr}	35				nS			
Typical Junction Capacitance (Note 2)	C_J	18				pF			
Thermal Resistance Junction to Ambient (Note 3)	R_{JA}	75				$^{\circ}\text{C}/\text{W}$			
Thermal Resistance Junction to Lead (Note 3)	R_{JL}	20							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^{\circ}\text{C}$

- Note: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
 3. Mounted on PCB with 5.0mm x 5.0mm x 0.013mm thick copper pads.

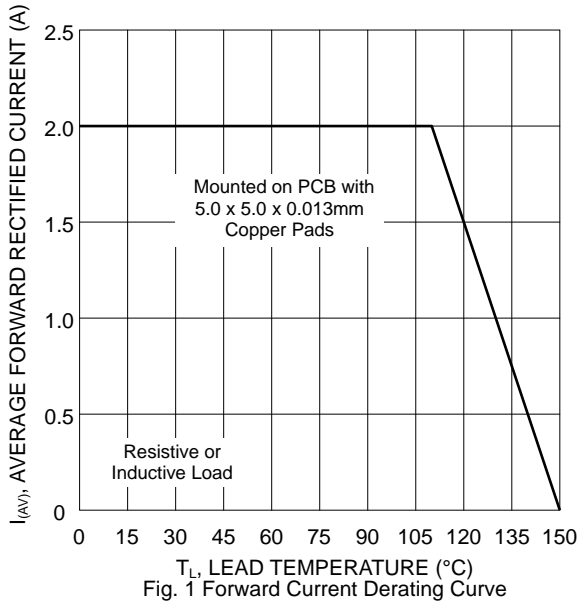


Fig. 1 Forward Current Derating Curve

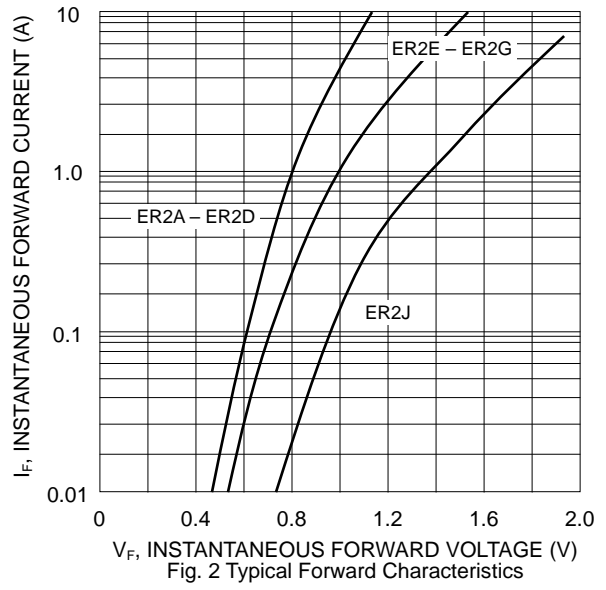


Fig. 2 Typical Forward Characteristics

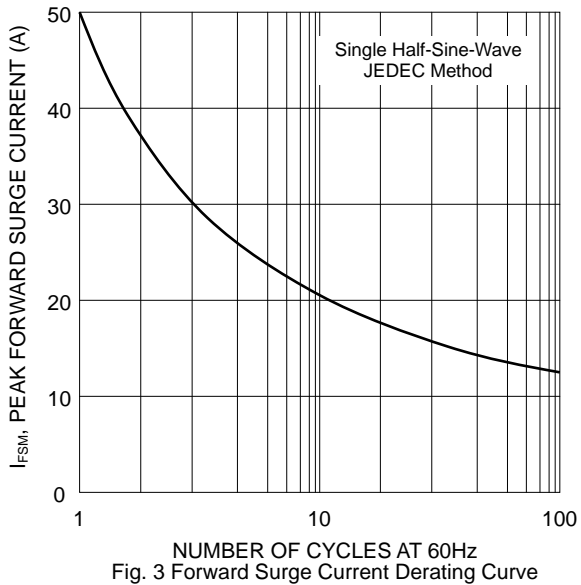


Fig. 3 Forward Surge Current Derating Curve

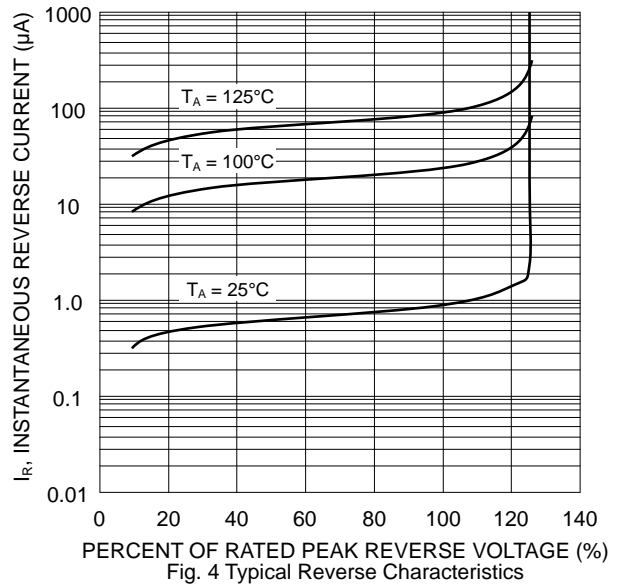


Fig. 4 Typical Reverse Characteristics

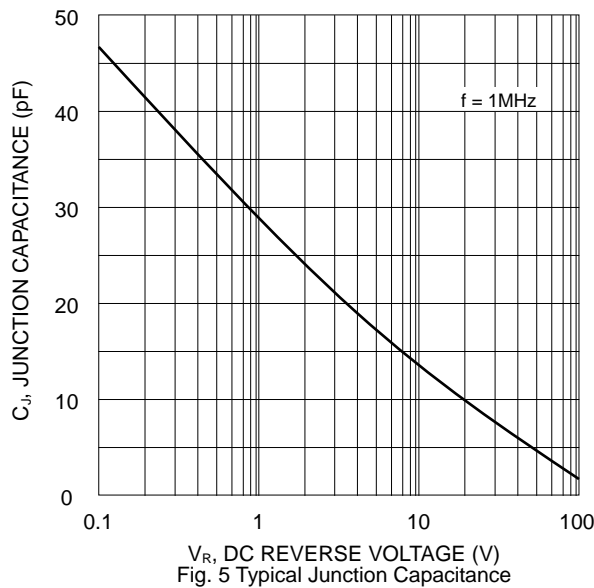
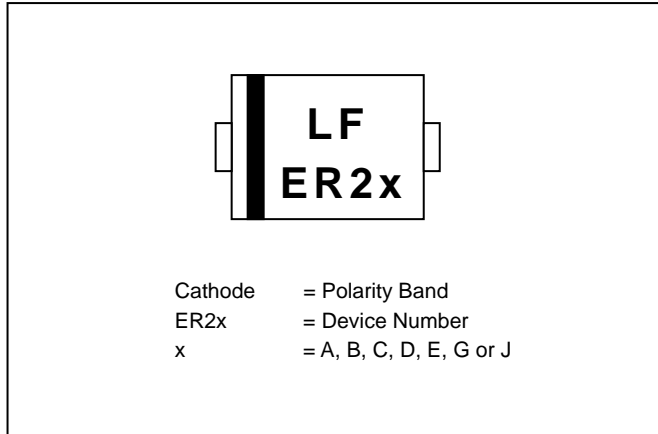
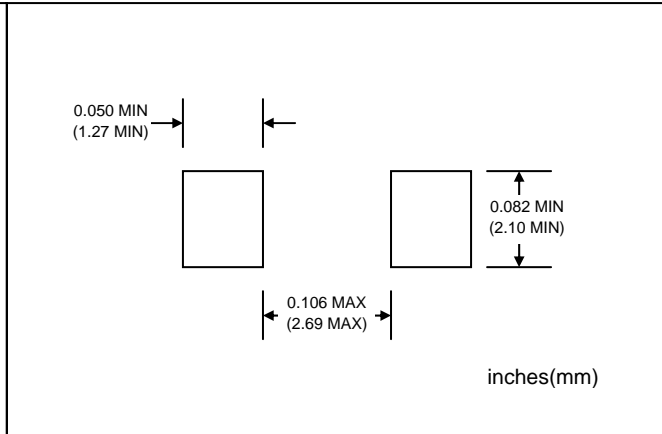


Fig. 5 Typical Junction Capacitance

MARKING INFORMATION



RECOMMENDED FOOTPRINT



PACKAGING INFORMATION

TAPE & REEL

330mm
 Product ID Label
 12mm
 Direction of Unreeling
 8mm
 12mm
 4mm
 1.6mm

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