DACO®

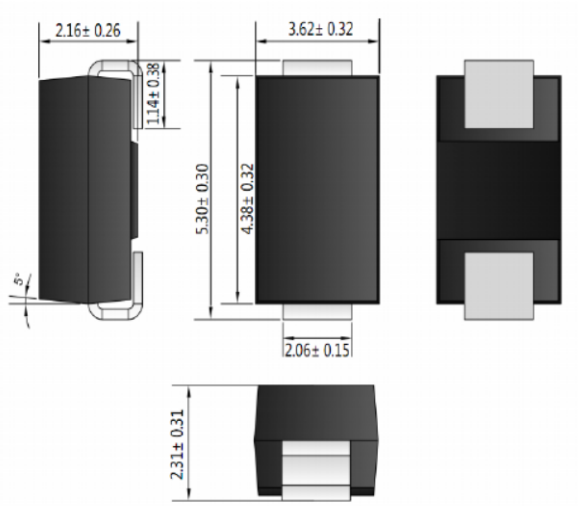
S2A – S2M

2.0A SURFACE MOUNT GLASS PASSIVATED DIODE

Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 60A Peak
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-0

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

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

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

Characteristic	Symbol	S2A	S2B	S2D	S2G	S2J	S2K	S2M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @T_L = 110°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}	60							A
Forward Voltage @I_F = 2.0A	V_{FM}	1.1							V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	5.0 200							μA
Typical Junction Capacitance (Note 1)	C_J	30							pF
Typical Thermal Resistance (Note 2) Typical Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	53 16							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150							°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
2. Junction to ambient, device mounted on PCB with 8.0mm x 8.0mm copper pads.
3. Junction to lead, device mounted on PCB with 8.0mm x 8.0mm copper pads.

Fig. 1 Forward Current Derating Curve

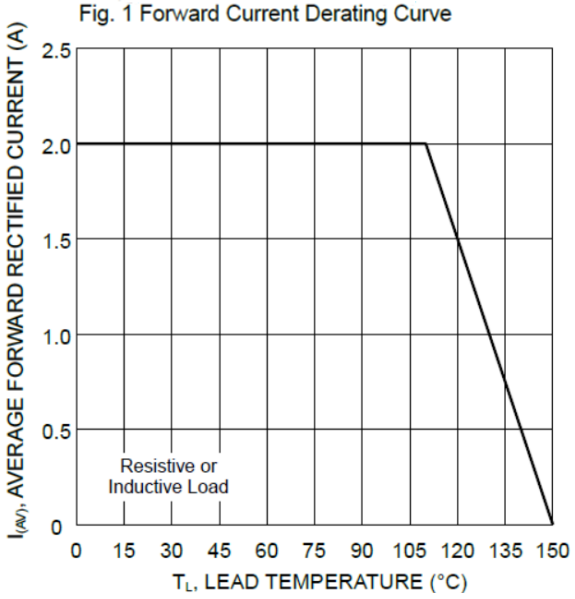


Fig. 2 Typical Forward Characteristics

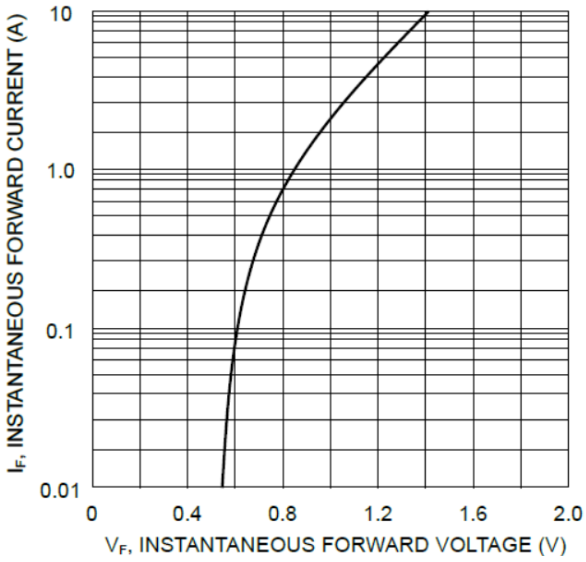


Fig. 3 Forward Surge Current Derating Curve

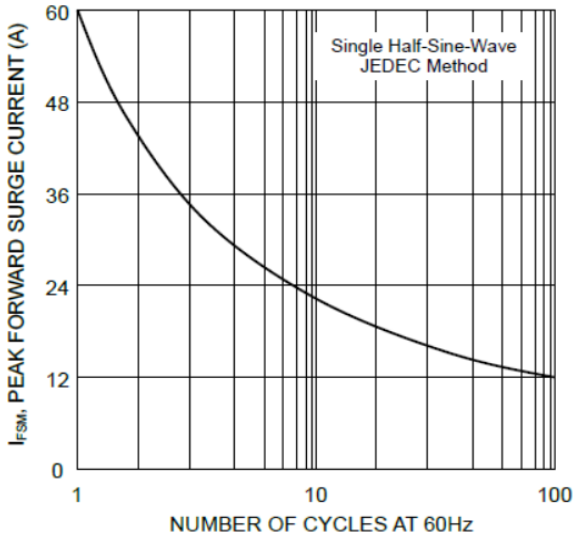


Fig. 4 Typical Reverse Characteristics

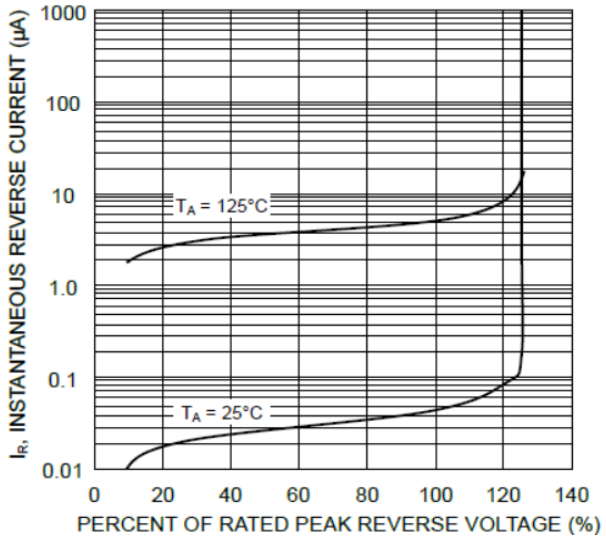
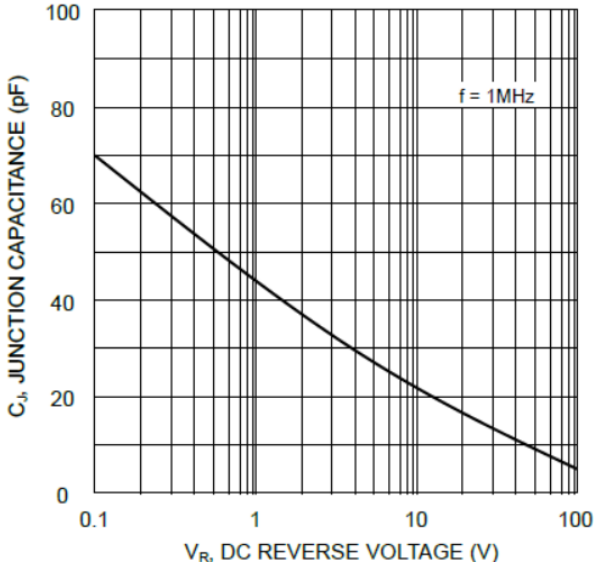
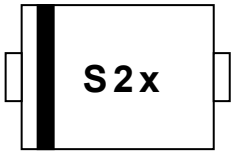


Fig. 5 Typical Junction Capacitance

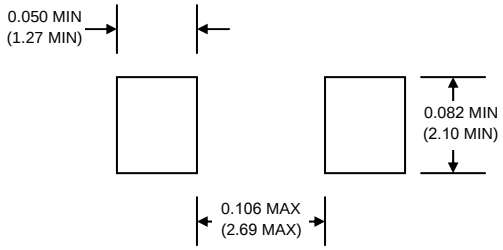


MARKING INFORMATION



Cathode = Polarity Band
S2x = Device Number
x = A, B, C, D, G, J, K or M

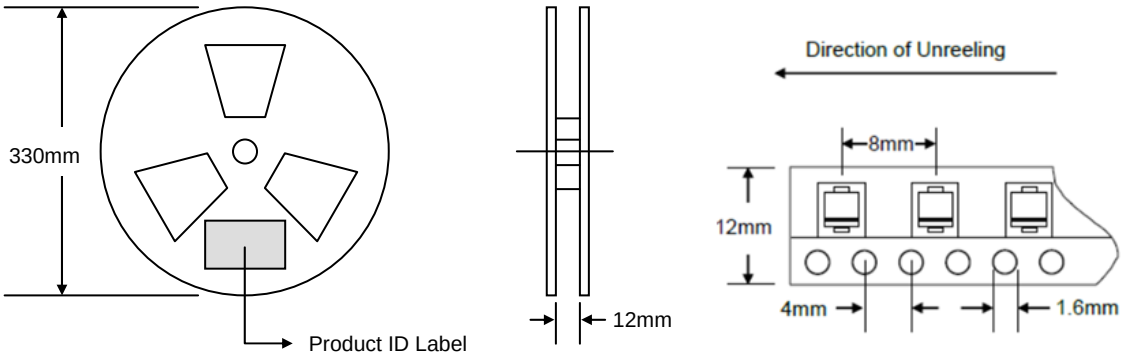
RECOMMENDED FOOTPRINT



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

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