WON-TOP ELECTRONICS

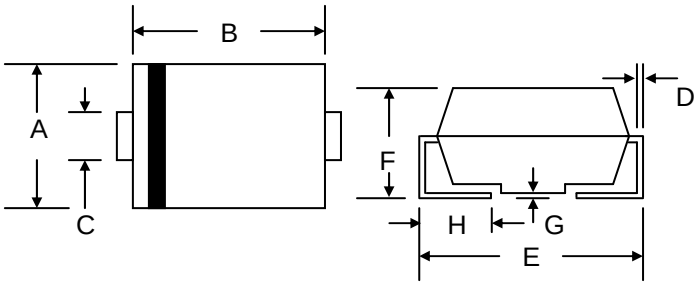
S2AA – S2MA

2.0A SURFACE MOUNT GLASS PASSIVATED STANDARD DIODE

RoHS Pb

Features

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



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 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	S2AA	S2BA	S2DA	S2GA	S2JA	S2KA	S2MA	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)	$R_{\theta JA}$ $R_{\theta JL}$	75 20							°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.

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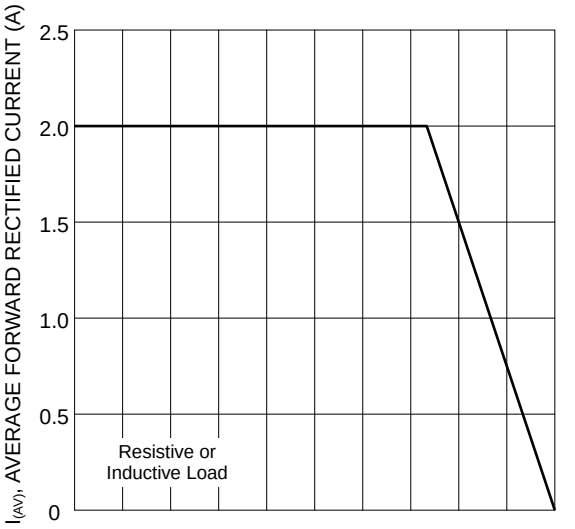


Fig. 1 Forward Current Derating Curve

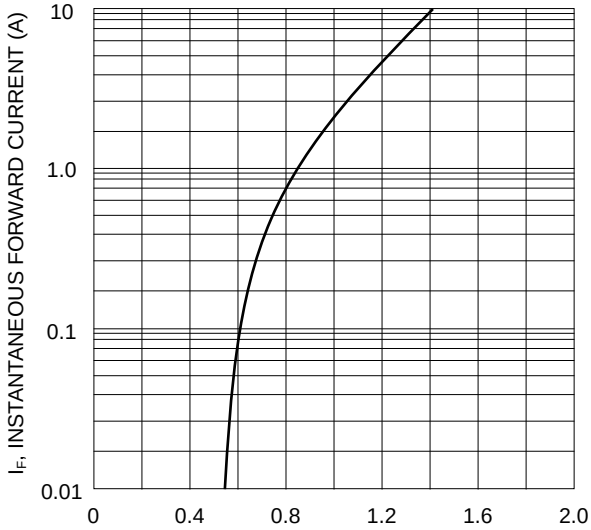


Fig. 2 Typical Forward Characteristics

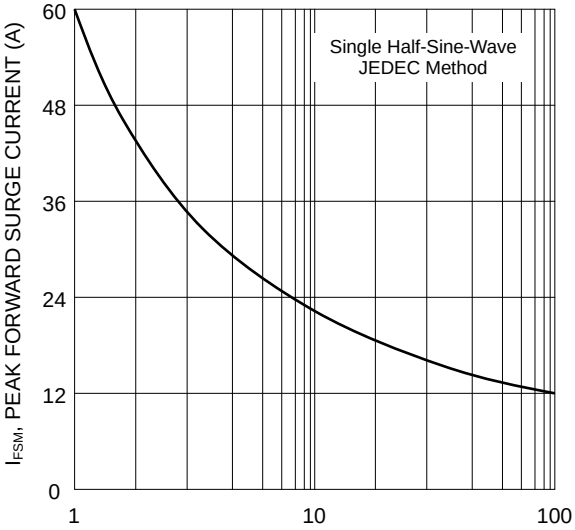


Fig. 3 Forward Surge Current Derating Curve

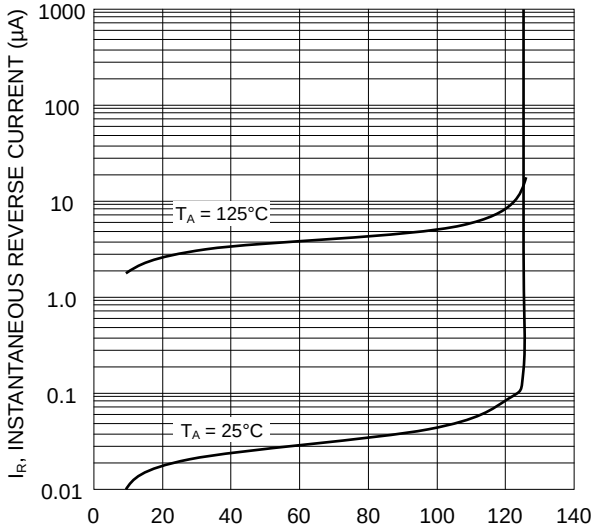


Fig. 4 Typical Reverse Characteristics

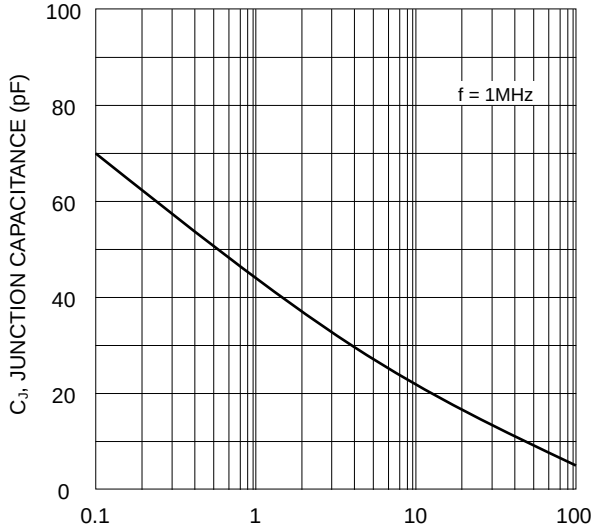
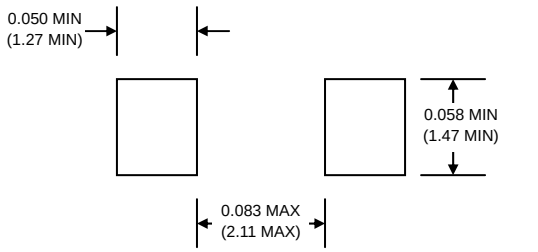


Fig. 5 Typical Junction Capacitance

MARKING INFORMATION

Cathode	= Polarity Band
S2xA	= Device Number
x	= A, B, D, G, J, K or M

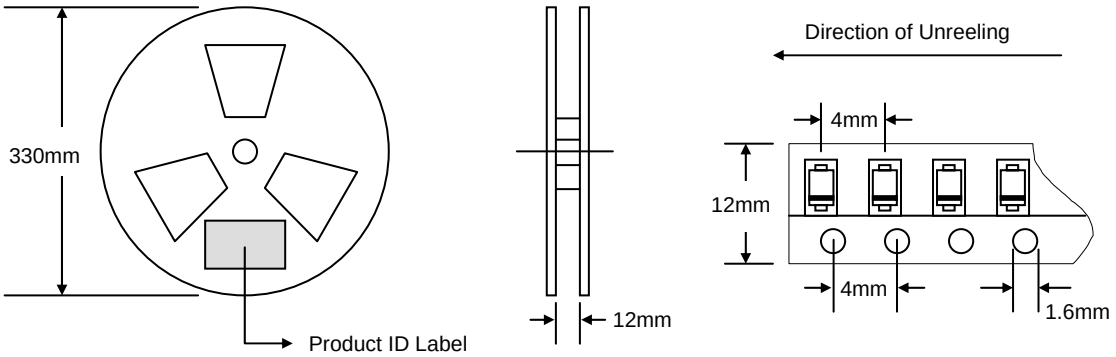
RECOMMENDED FOOTPRINT



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

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

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
S2AA-T3	SMA	5000/Tape & Reel
S2BA-T3	SMA	5000/Tape & Reel
S2DA-T3	SMA	5000/Tape & Reel
S2GA-T3	SMA	5000/Tape & Reel
S2JA-T3	SMA	5000/Tape & Reel
S2KA-T3	SMA	5000/Tape & Reel
S2MA-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, S2AA-T3-LF**.

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