

S2A-S2M

Technical Data Data Sheet N0562, Rev. A



S2A THRU S2M 2.0A SURFACE MOUNT GLASS PASSIVATED RECTIFIER



- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-0
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Data

- Case: SMB molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.09 grams

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

| Type Number | Symbol | S2A | S2B | S2D | S2G | S2J | S2K | S2M | Units |
|---|--|------------|-----|-----|---------|-----|-----|------|-------|
| 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 |
| Maximum RMS voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current @T _L = 110°C | lo | 2.0 | | | А | | | | |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 60 | | А | | | | | |
| Forward Voltage $@ I_F = 2.0 A$ | VF | 1.10 | | V | | | | | |
| Peak Reverse Current@TA = 25°CAt Rated DC Blocking Voltage@TA = 125°C | I _{RM} | 5.0 200 | | | μA | | | | |
| Reverse Recovery Time(Note1) | trr | | | | 2.5 | | | | μS |
| Typical Junction Capacitance(Note2) | CJ | 30 | | | | pF | | | |
| Typical Thermal Resistance Junction to Lead (Note 3) | R _{θJL} | 16 | | | °C/W | | | | |
| Operating and Storage Temperature Range | TJ,TSTG | | | -55 | to +150 | | | | °C |

Note: 1. Reverse recovery condition IF=0.5A, IR=1.0A, Irr=0.25A

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3. Mounted on P.C.B.with 8.0mm 2 land areas.

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Circuit Diagram



SMB



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Ratings and Characteristics Curves



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Mechanical Dimensions SMB



| SYMBOL | Millir | neters | Inches | | |
|--------|--------|--------|--------|-------|--|
| STMBOL | Min. | Max. | Min. | Max. | |
| A | 3.30 | 3.94 | 0.130 | 0.155 | |
| В | 4.06 | 4.70 | 0.160 | 0.185 | |
| С | 1.80 | 2.20 | 0.071 | 0.087 | |
| D | 0.152 | 0.305 | 0.006 | 0.012 | |
| E | 4.80 | 5.59 | 0.189 | 0.220 | |
| F | 2.10 | 2.60 | 0.083 | 0.102 | |
| G | 0.051 | 0.203 | 0.002 | 0.008 | |
| н | 0.76 | 1.52 | 0.030 | 0.060 | |

Marking Diagram

S2A

XXXXX

Ordering Information

| Device | Package | Shipping | | |
|---------|--------------|----------------|--|--|
| S2A-S2M | SMB(Pb-Free) | 3000pcs / reel | | |

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Carrier Tape Specification SMB



| SYMBOL | Millimeters | | | | | |
|--------|-------------|-------|--|--|--|--|
| | Min. | Max. | | | | |
| A | 3.99 | 4.19 | | | | |
| В | 5.72 | 5.92 | | | | |
| С | 3.23 | 3.43 | | | | |
| d | 1.40 | 1.60 | | | | |
| E | 1.40 | 1.60 | | | | |
| F | 5.60 | 5.70 | | | | |
| Р | 7.90 | 8.10 | | | | |
| P0 | 3.90 | 4.10 | | | | |
| P1 | 1.90 | 2.10 | | | | |
| Т | - | 0.60 | | | | |
| W | 11.80 | 12.20 | | | | |

Where XXXXX is YYWWL

Cautions: Molding resin

S2A YY

ww

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= Type Number = Year = Week

= Lot Number

Epoxy resin UL:94V-0

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