

# 1SMB5.0AT3G Series, SZ1SMB5.0AT3G Series



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## 600 Watt Peak Power Zener Transient Voltage Suppressors

Littelfuse.com

### Unidirectional

The SMB series is designed to protect voltage sensitive components from high voltage, high energy transients. They have excellent clamping capability, high surge capability, low zener impedance and fast response time. The SMB series is supplied in the Littelfuse exclusive, cost-effective, highly reliable package and is ideally suited for use in communication systems, automotive, numerical controls, process controls, medical equipment, business machines, power supplies and many other industrial/consumer applications.

#### Features

- Working Peak Reverse Voltage Range – 5.0 V to 170 V
- Standard Zener Breakdown Voltage Range – 6.7 V to 199 V
- Peak Power – 600 W @ 1.0 ms
- ESD Rating of Class 3 (> 16 kV) per Human Body Model
- Maximum Clamp Voltage @ Peak Pulse Current
- Low Leakage < 5.0  $\mu$ A Above 10 V
- UL 497B for Isolated Loop Circuit Protection
- Response Time is Typically < 1.0 ns
- SZ Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable
- Pb-Free Packages are Available

#### Mechanical Characteristics

**CASE:** Void-free, transfer-molded, thermosetting plastic

**FINISH:** All external surfaces are corrosion resistant and leads are readily solderable

**MAXIMUM CASE TEMPERATURE FOR SOLDERING PURPOSES:**  
260°C for 10 Seconds

**LEADS:** Modified L-Bend providing more contact area to bond pads

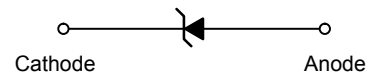
**POLARITY:** Cathode indicated by polarity band

**MOUNTING POSITION:** Any

### PLASTIC SURFACE MOUNT ZENER OVERVOLTAGE TRANSIENT SUPPRESSORS 5.0 V – 170 V, 600 W PEAK POWER



SMB  
CASE 403A  
PLASTIC



#### MARKING DIAGRAM



- A = Assembly Location
- Y = Year
- WW = Work Week
- xx = Device Code (Refer to page 3)
- = Pb-Free Package

(Note: Microdot may be in either location)

#### ORDERING INFORMATION

Device	Package	Shipping
1SMBxxxAT3G	SMB (Pb-Free)	2,500 / Tape & Reel
SZ1SMBxxxAT3G	SMB (Pb-Free)	2,500 / Tape & Reel

#### DEVICE MARKING INFORMATION

See specific marking information in the device marking column of the Electrical Characteristics table on page 3 of this data sheet.











