

### Features

- ◆Bi-Directional Transient Voltage Suppressor
- ◆Low capacitance and Low Leakage
- ◆ESD Protection, IEC61000-4-2 Level 4
- ◆S O D 923 Micro SMD package (Fig-1)
- Dimensions: 1.0 mm x 0.6 mm (0.039" x 0.024")
- ◆RoHS compliant
- ◆UL-94 V-0 / Green EMC
- ◆Matte Tin Lead finish (Pb-Free)
- ◆Moisture Level Sensitivity 1
- ◆Device marking: EA

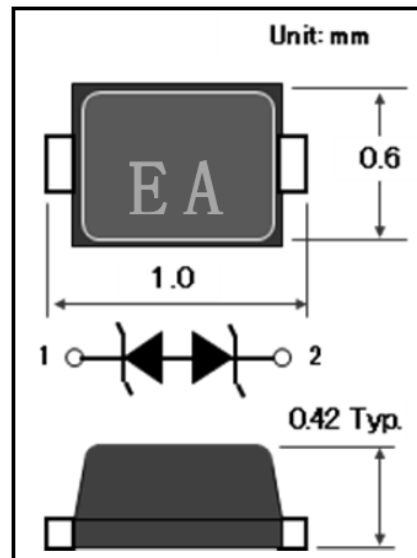


Fig -1 Package SOD923

### Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Symbol            | Parameter                          | Value      | Unit             |
|-------------------|------------------------------------|------------|------------------|
| $I_{PP}^{*1}$     | Maximum Reverse Peak Pulse Current | 7.0        | A                |
| $V_{ESD-Air}$     | ESD Voltage IEC61000-4-2 Air       | $\pm 15$   | KV               |
| $V_{ESD-contact}$ | ESD Voltage IEC61000-4-2 Contact   | $\pm 8$    | KV               |
| $T_J$             | Junction Temperature               | 150        | $^\circ\text{C}$ |
| $T_{STG}$         | Storage Temperature                | -55 ~ +150 | $^\circ\text{C}$ |
| $P_D$             | Power Dissipation                  | 150        | mW               |

\*1  $t_P = 8/20\mu\text{s}$

### Electrical Characteristics $T_A = 25^\circ\text{C}$

| Symbol    | Parameter                               | Conditions   | Min | Typ  | Max | Units         |
|-----------|---|--|-----|------|-----|---------------|
| $V_{RWM}$ | Reverse Working Peak Voltage            | $I_R = \pm 1\mu\text{A}$                           |     |      | 5.0 | V             |
| $V_{BR}$  | Reverse Breakdown Voltage<br>Pin 1 to 2 | $I_T = \pm 1\text{mA}$                             | 6.0 |      |     | V             |
| $I_R$     | Reverse Current                         | $V_{RWM} = \pm 5\text{V}$                          |     |      | 1.0 | $\mu\text{A}$ |
| $V_C$     | Clamping Voltage                        | $I_{PP} = \pm 7\text{A}$ , $t_P = 8/20\mu\text{s}$ |     |      | 9.0 | V             |
| $C_D$     | Diode Capacitance                       | $V_R = 0\text{V}$ , $f = 1\text{MHz}$              |     | 13.5 |     | pF            |

### Ordering Information

| Device      | Package | Shipping                           | Tape wide | Emboss pitch | Tape specification | Notes |
|-------------|---------|------------------------------------|-----------|--------------|--------------------|-------|
| ESDB5.0ECM9 | SOD923  | Tape & Reel<br>8000pcs /7"<br>Reel | 8 mm      | 2 mm         | Conductive         |       |

### Package Dimensions

