# **Excellent Integrated System Limited**

Stocking Distributor

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Micro Commercial Components (MCC) ESDLC5V0D9B-TP

For any questions, you can email us directly: <a href="mailto:sales@integrated-circuit.com">sales@integrated-circuit.com</a>

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Micro Commercial Components



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# ESDLC5V0D9B

### **Features**

- Halogen free available upon request by adding suffix "-HF"
- For sensitive ESD protection
- Excellent clamping capability
- Low leakage
- ESD rating of class 3(>16KV)per Human Body Mode
- Fast response ,response time less than 1ns.
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information) Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## **Maximum Ratings**

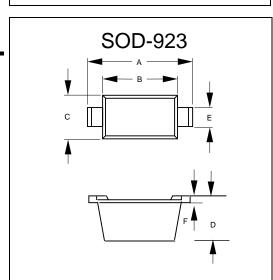
Operating Junction &StorageTemperature: -55°C to +150°C

| Parameter                |         | Symbol | Limits | unit |
|--------------------------|---------|--------|--------|------|
| IEC61000-4-2(ESD)        | Air     |        | ±15    | 10.7 |
|                          | Contact |        | ±8     | KV   |
| ESD Voltage per human b  |         | 16     | KV     |      |
| Peak Pulse Power(8/20us) |         | Ppp    | 80     | W    |

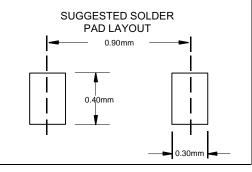
### **Pin Configuration-Top View**



## **ESD Protection Device**



| DIMENSIONS |        |      |      |      |      |
|------------|--------|------|------|------|------|
| DIM        | INCHES |      | MM   |      | NOTE |
|            | MIN    | MAX  | MIN  | MAX  |      |
| Α          | .037   | .041 | 0.95 | 1.05 |      |
| В          | .030   | .033 | 0.75 | 0.85 |      |
| С          | .022   | .026 | 0.55 | 0.65 |      |
| D          | .014   | .017 | 0.36 | 0.43 |      |
| Е          | .006   | .010 | 0.15 | 0.25 |      |
| F          | .003   | .007 | 0.07 | 0.17 |      |



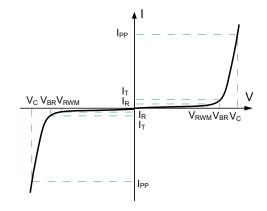
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#### **ELECTRICAL CHARACTERISTICS** (T<sub>A</sub> = 25°C unless otherwise noted)

| Symbol          | Parameter  |  |  |
|-----------------|--|--|--|
| I <sub>PP</sub> | Maximum Reverse Peak Pulse Current                 |  |  |
| V <sub>C</sub>  | Clamping Voltage @ I <sub>PP</sub>                 |  |  |
| $V_{RWM}$       | Working Peak Reverse Voltage                       |  |  |
| I <sub>R</sub>  | Maximum Reverse Leakage Current @ V <sub>RWM</sub> |  |  |
| $V_{BR}$        | V <sub>BR</sub> Breakdown Voltage @ I <sub>T</sub> |  |  |
| I <sub>T</sub>  | Test Current                                       |  |  |
| С               | Capacitance @V <sub>R</sub> =0 and f =1MHz         |  |  |



### Electrical characteristics per line@25 ( unless otherwise specified)

| Parameter               | Symbol         | Conditions                  | Min. | Тур. | Max. | Units |
|-------------------------|----------------|-----------------------------|------|------|------|-------|
| Working Voltage         | $V_{RWM}$      |                             |      |      | 5    | V     |
| Breakdown Voltage       | $V_{BR}$       | I <sub>t</sub> =1mA         | 5.6  | 6.7  | 7.8  | V     |
| Reverse Leakage Current | I <sub>R</sub> | V <sub>RWM</sub> =5V        |      |      | 1    | μA    |
| Junction Capacitance    | C <sub>j</sub> | V <sub>R</sub> =0V f = 1MHz |      | 2.1  |      | pF    |

### **Typical Characteristics**

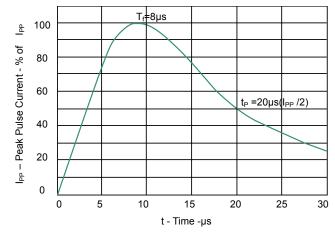


Fig 1.Pulse Waveform

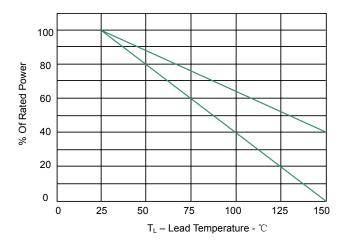


Fig 2.Power Derating Curve

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## Distributor of Micro Commercial Components (MCC): Excellent Integrated System Limite

Datasheet of ESDLC5V0D9B-TP - TVS DIODE 5VWM SOD923

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#### **Ordering Information:**

| Device         | Packing               |  |  |
|----------------|-----------------------|--|--|
| Part Number-TP | Tape&Reel: 8Kpcs/Reel |  |  |

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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