

**Micro Commercial Components** 

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## ESD5V0K5

### **Features**

- For sensitive ESD protection
- Excellent clamping capability
- Low leakage
- ESD rating of class 3(>16KV)per Human Body Mode
- For space saving application
- Fast response ,response time less than 1ns.
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1

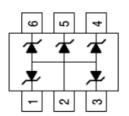
# **Maximum Ratings**

- Operating Junction &StorageTemperature: -55°C to +150°C
- Maximum Thermal Resistance; 833°C/W Junction To Ambient

| Parameter                | Symbol  | Limits | unit |      |
|--------------------------|---------|--------|------|------|
| IEC61000-4-2(ESD)        | Air     |        | ±15  | 10.7 |
|                          | Contact |        | ±15  | KV   |
| ESD Voltage per human    |         | 16     | K۷   |      |
| Power Dissipation(Note 1 | Pd      | 150    | mw   |      |
| Peak Power Dissipation@  | Ppk     | 100    | W    |      |

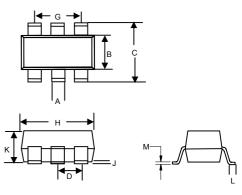
1. Only 1 diode under power. For all 5 diodes under power, PD will be 20%. Mounted on FR--4 board with min pad.

# **PinConfiguration**



## 5 Volts ESD Protection Device





| DIMENSIONS |        |      |       |      |      |  |
|------------|--------|------|-------|------|------|--|
|            | INCHES |      | М     |      |      |  |
| DIM        | MIN    | MAX  | MIN   | MAX  | NOTE |  |
| Α          | .006   | .014 | 0.15  | 0.35 |      |  |
| В          | .045   | .053 | 1.15  | 1.35 |      |  |
| С          | .085   | .096 | 2.15  | 2.45 |      |  |
| D          | .026   |      | 0.65N |      |      |  |
| G          | .047   | .055 | 1.20  | 1.40 |      |  |
| Н          | .071   | .087 | 1.80  | 2.20 |      |  |
| J          |        | .004 |       | 0.10 |      |  |
| K          | .035   | .043 | 0.90  | 1.10 |      |  |
| L          | .010   | .018 | 0.26  | 0.46 |      |  |
| M          | .003   | .006 | 0.08  | 0.15 |      |  |



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### **ELECTRICAL CHARACTERISTICS** ( $T_A = 25^{\circ}C$ unless otherwise noted, $V_F = 0.9 \text{ V Max.} \ @ I_F = 10\text{mA}$ for all types)

| Device*  | Device<br>Marking | V <sub>RWM</sub> (V) | I <sub>R</sub> (μ Α)<br>@ V <sub>RWM</sub> | V <sub>BR</sub> (V)<br>@ I <sub>T</sub> |     | I <sub>T</sub> | V <sub>c</sub> (V)<br>@Max<br>I <sub>PP</sub> =1A | V <sub>c</sub> (V)<br>@Max<br>I <sub>PP</sub> =5A | I <sub>PP</sub> (A) | C (pF) |
|----------|-------------------|----------------------|--|---|-----|----------------|---|---|---------------------|--------|
|          |                   | Max                  | Max  | Min                                     | Max | mA             | Max   | Max   | Max                 | Max    |
| ESD5V0K5 | 22                | 5.0                  | 5  | 6.0                                     | 7.2 | 1.0            | 9.5   | 12.5  | 8                   | 130    |



### **Ordering Information**

| Device           | Packing             |
|------------------|---------------------|
| (Part Number)-TP | Tape&Reel3Kpcs/Reel |

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