$\cdot M \cdot C \cdot C \cdot$
Micro Commercial Components

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## Features

- Bi-directional ESD protection of one line
- Low reverse stand-off voltage:5V
- Low leakage
- Low reverse clamping voltage
- IEC 61000-4-2 level 4 ESD protection
- 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: $-55^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}$

| Parameter | Symbol | Limits | unit |
| :---: | :---: | :---: | :---: |
| IEC61000-4-2(ESD)Air <br> Contact |  | $\pm 15$ <br> $\pm 8$ | KV |
| ESD Voltage per human body model |  | 16 | KV |
| ESD Voltage Machine Modele |  | 400 | V |
| Peak Pulse Power(8/20us Waveform) | Ppp | 50 | W |
| Peak Pulse Current(8/20us Waveform) | Ipp | 5 | A |

Marking:


Front side

## Pin Configuration



## ESDBL5V0AE2

## ESD Protection Device



ELECTRICAL CHARACTERISTICS ( $\mathrm{T}_{\mathrm{A}}=25^{\circ} \mathrm{C}$ unless otherwise noted)

| Symbol | Parameter |
| :--- | :--- |
| $I_{P P}$ | Maximum Reverse Peak Pulse Current |
| $V_{C}$ | Clamping Voltage @ $I_{P P}$ |
| $V_{R W M}$ | Working Peak Reverse Voltage |
| $I_{R}$ | Maximum Reverse Leakage Current @ $V_{R W M}$ |
| $V_{B R}$ | Breakdown Voltage @ $I_{T}$ |
| $I_{T}$ | Test Current |



Electrical characteristics per line@25 ${ }^{\circ}$ ( unless otherwise specified)

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Units |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Working Voltage(note1) | $\mathrm{V}_{\mathrm{RWM}}$ |  |  |  | 5 | V |
| Breakdown Voltage | $\mathrm{V}_{\mathrm{BR}}$ | $\mathrm{I}_{\mathrm{t}}=1 \mathrm{~mA}$ | 5.8 |  | 8.0 | V |
| Reverse Leakage Current | $\mathrm{I}_{\mathrm{R}}$ | $\mathrm{V}_{\mathrm{RWM}}=5 \mathrm{~V}$ |  |  | 0.1 | $\mu \mathrm{~A}$ |
| Clamping Voltage(note2) | $\mathrm{V}_{\mathrm{C}}$ | $\mathrm{I}_{\mathrm{PP}}=5 \mathrm{~A}$ |  |  | 10 | V |
| Total Capacitance | $\mathrm{C}_{\mathrm{tot}}$ | $\mathrm{V}_{\mathrm{R}}=0 \mathrm{~V} \quad \mathrm{f}=1 \mathrm{MHz}$ |  | 10 |  | pF |

Note1: Other voltages available upon request.
Note2: Non-repetitive current pulse 8/20us exponential decay waveform according to IEC61000-4-5.

## Typical Characteristics




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Ordering Information :

| Device | Packing |
| :---: | :---: |
| Part Number-TP | Tape\&Reel: 10Kpcs/Reel |


#### Abstract

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