



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Micro Commercial Components



Micro Commercial Components  
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# ESDBV5V0AE1

## Features

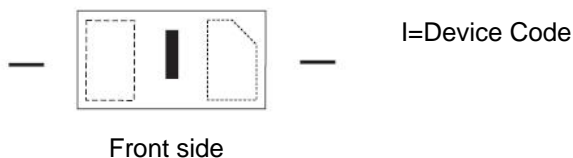
- For sensitive ESD protection
- Low reverse stand-off voltage:5V
- Low leakage
- Ultra-low clamping voltage
- IEC 61000-4-2 level 4 ESD protection
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## Maximum Ratings

- Operating Junction & Storage Temperature: -55°C to +150°C

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		$\pm 15$ $\pm 15$	KV
ESD Voltage per human body model		16	KV
ESD Voltage Machine Modele		400	V
Peak Pulse Power(8/20us Waveform)	Ppp	52	W
Peak Pulse Current(8/20us Waveform)	Ipp	4	A

## Marking Code:

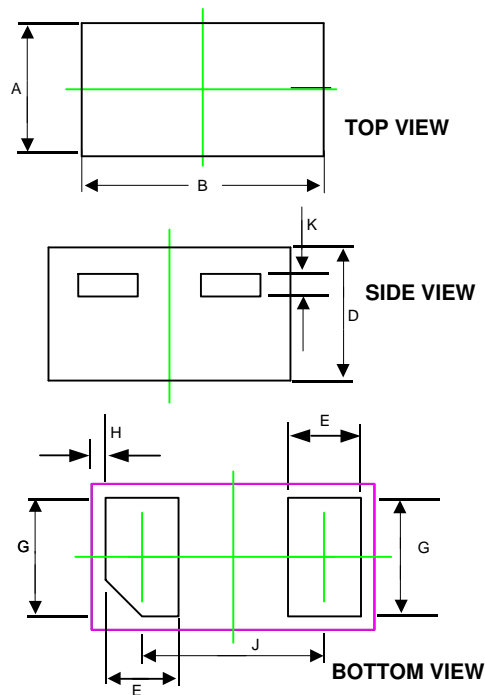


## Pin Configuration



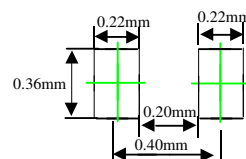
## ESD Protection Device

### 0201



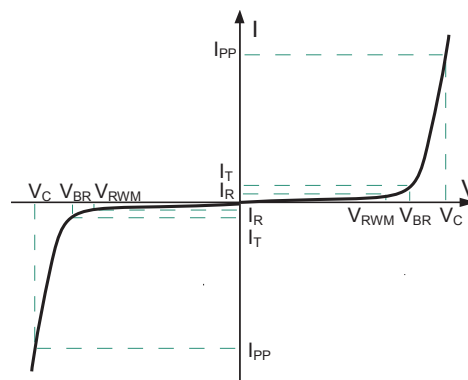
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.011	0.015	0.27	0.37	
B	0.022	0.026	0.57	0.67	
D	0.011	0.013	0.275	0.34	
E	0.005	0.008	0.125	0.195	
G	0.009	0.012	0.225	0.295	
H	0.001	REF.	0.030	REF.	
J	0.014	0.017	0.365	0.435	
K	0.002	REF.	0.050	REF.	

### SUGGESTED SOLDER PAD LAYOUT



**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Symbol	Parameter
$I_{PP}$	Maximum Reverse Peak Pulse Current
$V_C$	Clamping Voltage @ $I_{PP}$
$V_{RWM}$	Working Peak Reverse Voltage
$I_R$	Maximum Reverse Leakage Current @ $V_{RWM}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current



**Electrical characteristics per line @ 25 °C ( unless otherwise specified)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Working Voltage(note1)	$V_{RWM}$				5	V
Breakdown Voltage	$V_{BR}$	$I_t = 1\text{mA}$	5.6		8.0	V
Reverse Leakage Current	$I_R$	$V_{RWM} = 5\text{V}$			1	$\mu\text{A}$
Clamping Voltage(note2)	$V_C$	$I_{PP} = 4\text{A}$		10	13	V
Total Capacitance	$C_{tot}$	$V_R = 0\text{V}$ $f = 1\text{MHz}$		2		pF

Note1: Other voltages available upon request.

Note2: Non-repetitive current pulse 8/20 $\mu\text{s}$  exponential decay waveform according to IEC61000-4-5.



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Ordering Information :

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

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