



Micro Commercial Components
 20736 Marilla Street Chatsworth
 Chatsworth, CA 91311
 Phone: (818) 701-4933
 Fax: (818) 701-4939

ESDBU5V0AE1

ESD Protection Device

Features

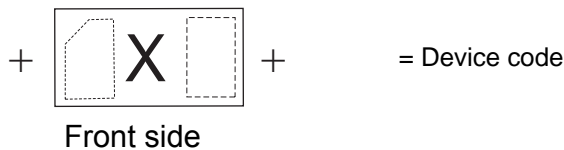
- Bi-directional ESD protection of one line
- Low capacitance: 0.9pF
- Reverse stand-off voltage: 5V
- IEC 61000-4-2 level 3 ESD protection
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

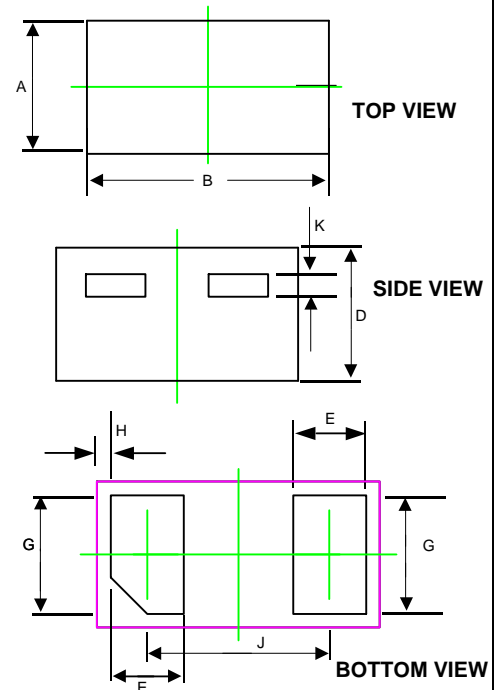
- Operating Junction & Storage Temperature: -55°C to +150°C

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		± 15 ± 15	KV
ESD Voltage per human body model		16	KV
ESD Voltage Machine Modele		400	V
Peak Pulse Power ⁽²⁾	Ppp	80	W
Peak Pulse Current ⁽²⁾	Ipp	4	A

Marking:

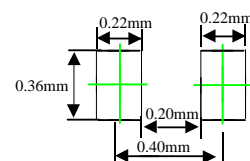


0201



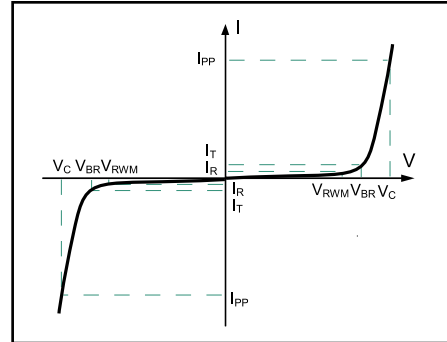
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.011	0.015	0.27	0.37	
B	0.022	0.026	0.57	0.67	
D	0.011	0.013	0.275	0.34	
E	0.005	0.008	0.125	0.195	
G	0.009	0.012	0.225	0.295	
H	0.001 REF.		0.030 REF.		
J	0.014	0.017	0.365	0.435	
K	0.002 REF.		0.050 REF.		

SUGGESTED SOLDER PAD LAYOUT



ELECTRICAL PARAMETER

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



V-I characteristics for a Bi-directional TVS

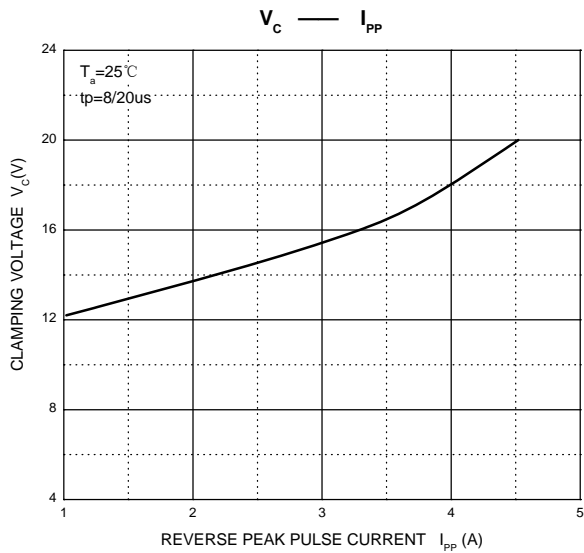
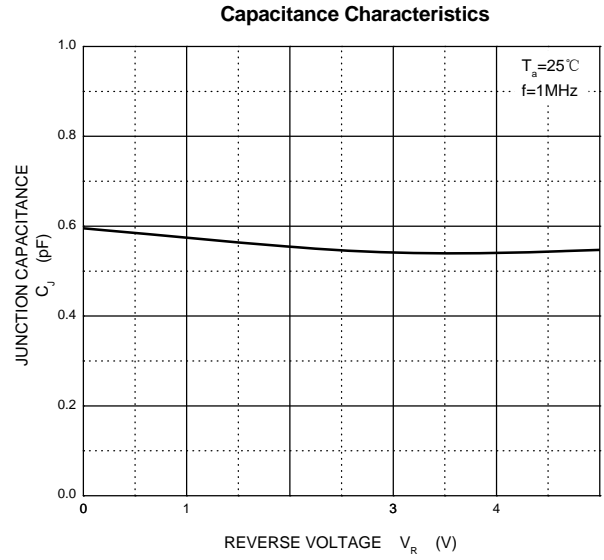
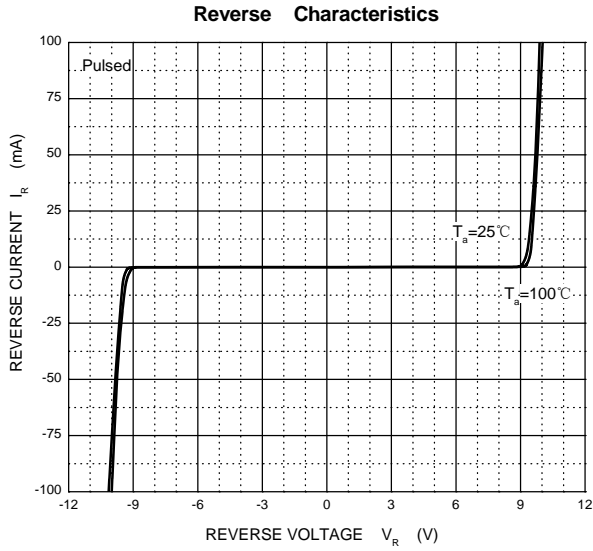
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse stand off voltage	$V_{RWM}^{(1)}$				5	V
Reverse leakage current	I_R	$V_{RWM}=5\text{V}$			1	μA
Breakdown voltage	$V_{(BR)}$	$I_T=1\text{mA}$	6.5	9.0		V
Clamping voltage	$V_C^{(2)}$	$I_{PP}=4\text{A}$			20	V
Junction capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$			0.9	pF

(1). Other voltages available upon request.

(2). Non-repetitive current pulse 8/20 μs exponential decay waveform according to IEC61000-4-5

TYPICAL CHARACTERISTICS



Ordering Information :

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

IMPORTANT NOTICE
<p>Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . Micro Commercial Components Corp . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold Micro Commercial Components Corp . and all the companies whose products are represented on our website, harmless against all damages.</p>
LIFE SUPPORT
<p>MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.</p>
CUSTOMER AWARENESS
<p>Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.</p>