

ESDV05CL

LOW CAPACITANCE TVS ARRAY

Features

- ESD Protection for 1 Line with Bi-directional.
- Provide ESD protection for the protected line to
- IEC 61000-4-2 (ESD) $\pm 20\text{kV}$ (air), $\pm 12\text{kV}$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 7A (8/20 μs)
- Cable Discharge Event (CDE)
- Ultra-small SOD-323 package saves board space.
- Protect one I/O line or one power line
- Fast turn-on and Low clamping voltage
- Low operating voltage: 5V
- Solid-state silicon-avalanche and active circuit

triggering technology

- RoHS Compliant Package

Application

- Computer Interfaces Protection
- Microprocessors Protection
- Serial and Parallel Ports Protection
- Control Signal Lines Protection
- Power lines on PCB Protection
- Latchup Protection

Mechanical Data

- Molded JEDEC SOD-323 Package
- Approximate Weight: 5 milligrams
- Lead-Free Pure-Tin Plating (Annealed)
- Solder Reflow Temperature: Pure-Tin - Sn, 100:

260-270°C

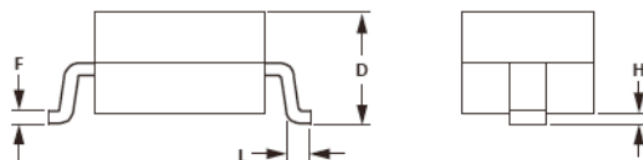
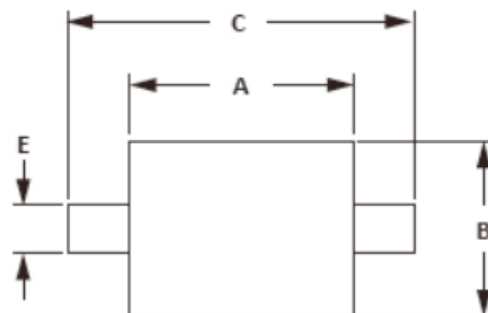
- 8mm Tape and Reel Per EIA Standard 481
- Flammability Rating UL 94V-0

Packing & Order Information

3,000/Reel



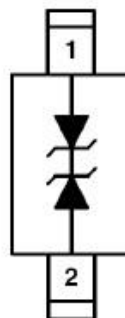
RoHS
COMPLIANT



OUTLINE DIMENSIONS				
DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.90	0.063	0.075
B	1.15	1.45	0.045	0.057
C	2.39	2.70	0.094	0.106
D	0.80	1.10	0.031	0.043
E	0.25	0.40	0.010	0.016
F	0.10	0.20	0.004	0.008
H	-	0.10	-	0.004
L	0.20	-	0.008	-

NOTES
 1. Controlling dimension: millimeters.
 2. Dimensioning and tolerances per ANSI Y14.5M, 1985.
 3. Dimensions are exclusive of mold flash and metal burrs.

Graphic symbol



ESDV05CL

LOW CAPACITANCE TVS ARRAY

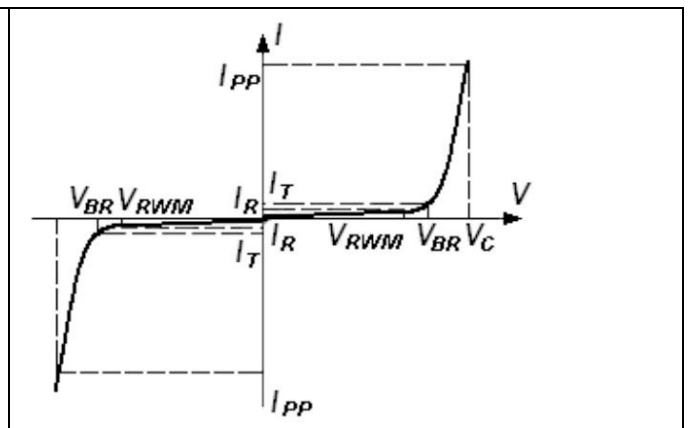
Absolute ratings (limiting value)

Symbol	Parameter	Value	Unit
PPK	Peak Pulse Power ($t_p = 8/20\mu s$)	110	W
IPP	Peak Pulse Current ($t_p = 8/20\mu s$)	8.5	A
VDC	Operating Supply Voltage (pin-1,-2 to pin-3)	6	V
VCL	Clamping Voltage (IPP=5A, $t_p=8/20\mu s$, T=25 °C)	8	V
VCL	Clamping Voltage (IPP=5A, $t_p=8/20\mu s$, T=25 °C)	9	V
VESD	ESD per IEC 61000-4-2 (Air)	± 22	KV
	ESD per IEC 61000-4-2 (Contact)	± 15	
TJ	Operating Supply Voltage (pin-1,-2 to pin-3)	-55 to +125	°C
TSTG	Storage Temperature Range	-55 to +150	°C
TL	Lead Solder Temperature – Maximum (10 Second Duration)	260	°C

Electrical Characteristics

Part Numbers	VBR			IT mA	VRWM V	IR uA	Cj TYP
	Min.	Typ.	Max.				
	V	V	V				
ESDV05CL	6.1	7	9	1	5	25	15

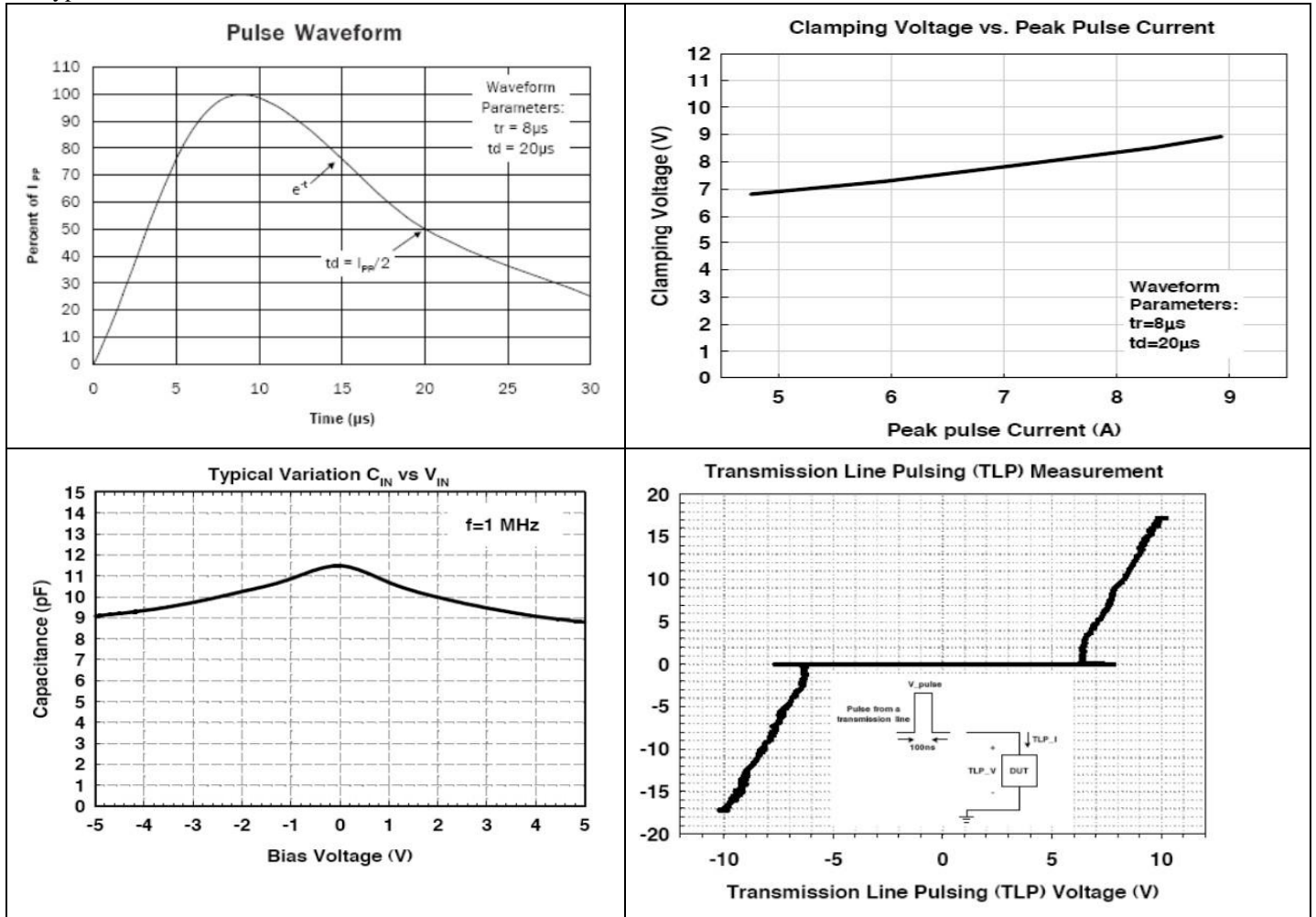
Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T



ESDV05CL

LOW CAPACITANCE TVS ARRAY

Typical Device Characteristics



ESDV05CL

LOW CAPACITANCE TVS ARRAY

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE

WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Bruckewell Technology Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Bruckewell"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Bruckewell makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Bruckewell disclaims

- (i) Any and all liability arising out of the application or use of any product.
- (ii) Any and all liability, including without limitation special, consequential or incidental damages.
- (iii) Any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Bruckewell's knowledge of typical requirements that are often placed on Bruckewell products in generic applications.

Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time.

Product specifications do not expand or otherwise modify Bruckewell's terms and conditions of purchase, including but not limited to the warranty expressed therein.