

Transient Voltage Suppressors for ESD Protection

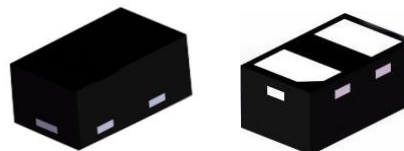
Low Capacitance

SE03N6B01GH

Features

- ◆ Protects one data, control or power line
- ◆ Low capacitance: 0.25pF (Typ.)
- ◆ Low leakage current: 0.1μA (Max.)
- ◆ Low clamping voltage

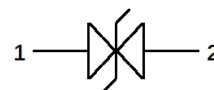
DFN1006-2L



Applications

- ◆ Power Management
- ◆ Industrial Application
- ◆ Power Supply Protection
- ◆ Many Other Portable Devices

Pin Configuration



Mechanical Characteristics

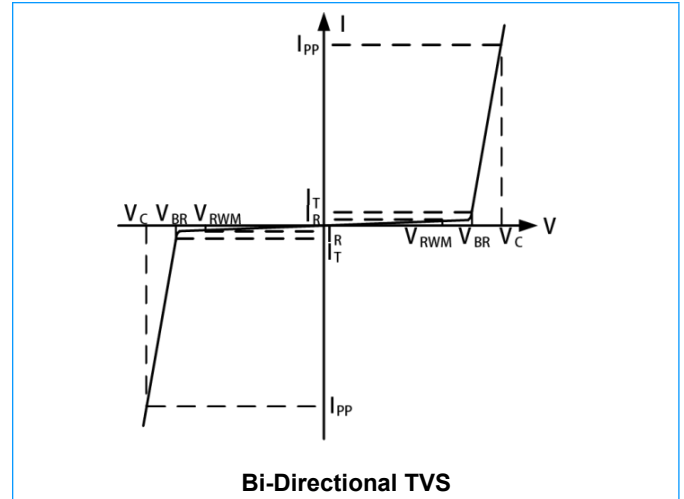
- ◆ DFN1006-2L Package
- ◆ Quantity Per Reel: 10,000pcs
- ◆ Reel Size: 7 inch
- ◆ Lead Finish: Lead Free

Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

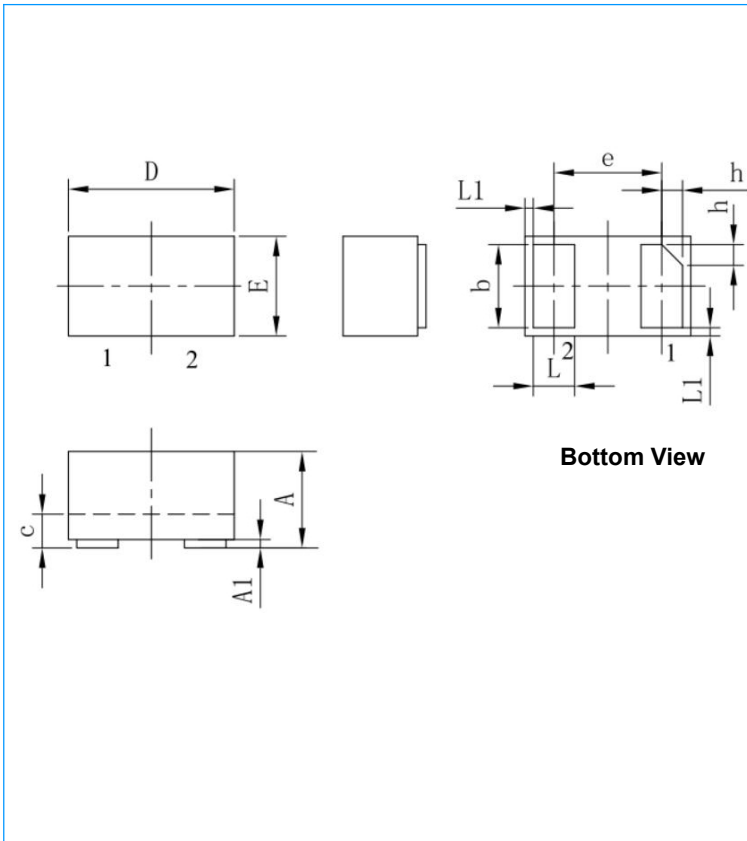
Symbol	Parameter	Value	Units
I _{PP}	Peak Pulse Current (t _P =8/20μs)	5	A
V _{ESD}	ESD per IEC 61000-4-2 (Air)	±30	kV
	ESD per IEC 61000-4-2 (Contact)	±30	
T _{OP}	Operating Temperature Range	-40 ~ +125	°C
T _{STG}	Storage Temperature Range	-55 ~ +150	°C

I-V Curve Characteristics

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


Electrical Characteristics ($T_A = 25^\circ\text{C}$, unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse maximum working voltage	V_{RWM}	--	--	--	3.3	V
Reverse breakdown voltage	V_{BR}	$I_T = 1\text{mA}$	4.2	--	7.5	V
Reverse leakage current	I_R	$V_{RWM} = 3.3\text{V}$	--	--	0.1	μA
Clamping Voltage	V_C	$I_{PP} = 1\text{A}$, $t_P = 8/20\mu\text{s}$	--	11	--	V
Clamping Voltage	V_C	$I_{PP} = 5\text{A}$, $t_P = 8/20\mu\text{s}$	--	25	--	V
Junction Capacitance	C_J	$V_R = 0\text{V}$, $f = 1\text{MHz}$	--	0.25	--	pF

DFN1006-2L Package Outline & Dimensions


Symbol	Millimeters			Inches		
	Min	Typ	Max	Min	Typ	Max
A	0.45	0.50	0.55	0.018	0.020	0.022
A1	0.00	0.02	0.05	0.000	0.001	0.002
b	0.45	0.50	0.55	0.018	0.020	0.022
c	0.12	0.15	0.18	0.005	0.006	0.007
D	0.95	1.00	1.05	0.037	0.039	0.041
e	0.59 BSC			0.023 BSC		
E	0.55	0.60	0.65	0.022	0.024	0.026
L	0.25	0.30	0.35	0.010	0.012	0.014
L1	0.05 REF			0.002 REF		
h	0.07	0.12	0.17	0.003	0.005	0.007

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