

■ Features

- Uni-directional ESD protection of one lines
- 80Watts peak pulse power ($t_p = 8/20\mu s$)
- Working voltage: 5V
- Junction capacitance: 0.6pF Typ
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2 $\pm 10kV$ contact $\pm 15kV$ air
- IEC 61000-4-5 (Lightning) 4A (8/20 μs)

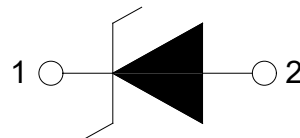
■ Applications

- Cellular handsets and accessories
- Portable Digital Assistants
- Notebooks & Handhelds
- Digital Cameras
- MP3 Players
- Peripherals

■ Mechanical Data

- Package:DFN1006-2L
- Molding compound flammability rating: UL 94V-0
- RoHS/WEEE Compliant

■ Schematic & PIN Configuration



■ Ordering Information

Part Number	Package	Marking	Packing	Reel Size
ESD9X5VU	DFN1006-2L		10000 Tape & Reel	7 inches

■ Absolute Maximum Rating($T_A=25^{\circ}\text{C}$ unless otherwise Specified)

Parameters	Symbol	Min	Max	Unit
Peak pulse power ($t_p=8/20\mu\text{s}$)@ 25°C	P_{pk}	-	80	W
Peak pulse current ($t_p=8/20\mu\text{s}$)@ 25°C	I_{PP}		4	A
ESD (IEC61000-4-2 air discharge) @ 25°C	V_{ESD}	-	± 15	kV
ESD (IEC61000-4-2 contact discharge) @ 25°C	V_{ESD}	-	± 10	kV
Junction temperature	T_J	-	125	$^{\circ}\text{C}$
Operating temperature	T_{OP}	-40	85	$^{\circ}\text{C}$
Storage temperature	T_{STG}	-55	150	$^{\circ}\text{C}$
Lead temperature	T_L	-	260	$^{\circ}\text{C}$

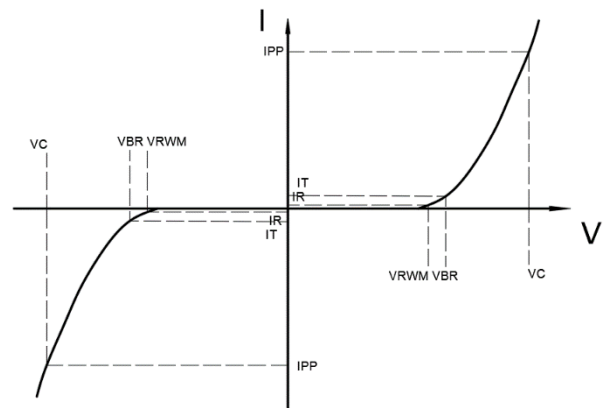
■ Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise Specified)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	6.0			V
Reverse Leakage Current	I_R	$V_{RWM}=5\text{V}$			1	μA
Clamping Voltage	V_C	$I_{PP}=1\text{A}$; $t_p=8/20\mu\text{s}$		15		V
Clamping Voltage	V_C	$I_{PP}=4\text{A}$; $t_p=8/20\mu\text{s}$		20		V
Junction Capacitance	C_J	I/O to GND; $V_R=0\text{V}$; $f=1\text{MHz}$		0.6		pF

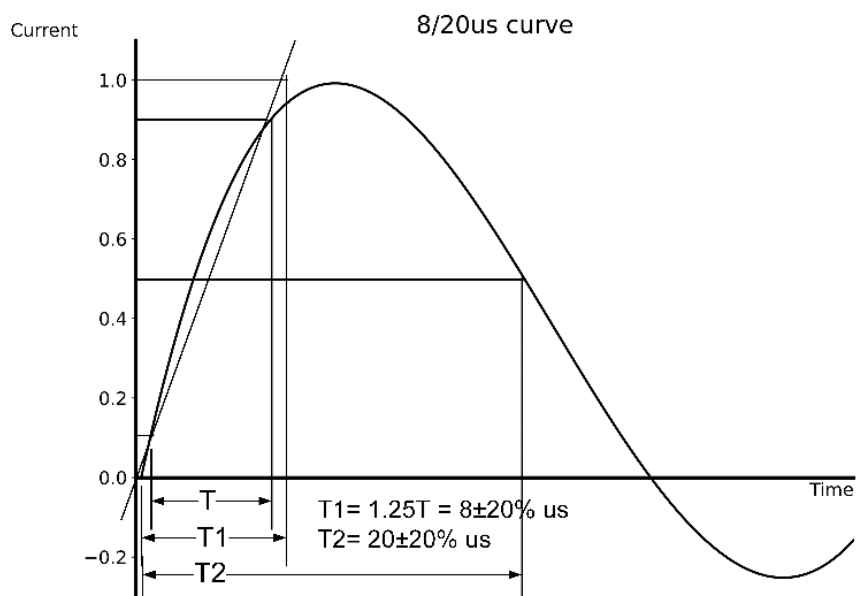


■ Electrical Parameters($T_A=25^{\circ}\text{C}$ unless otherwise Specified)

Symbol	Parameters
V_{RWM}	Peak Reverse Working Voltage
I_{R}	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_{T}
I_{T}	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_{C}	Clamping Voltage @ I_{PP}
I_{F}	Forward Current
V_{F}	Forward Voltage @ I_{F}

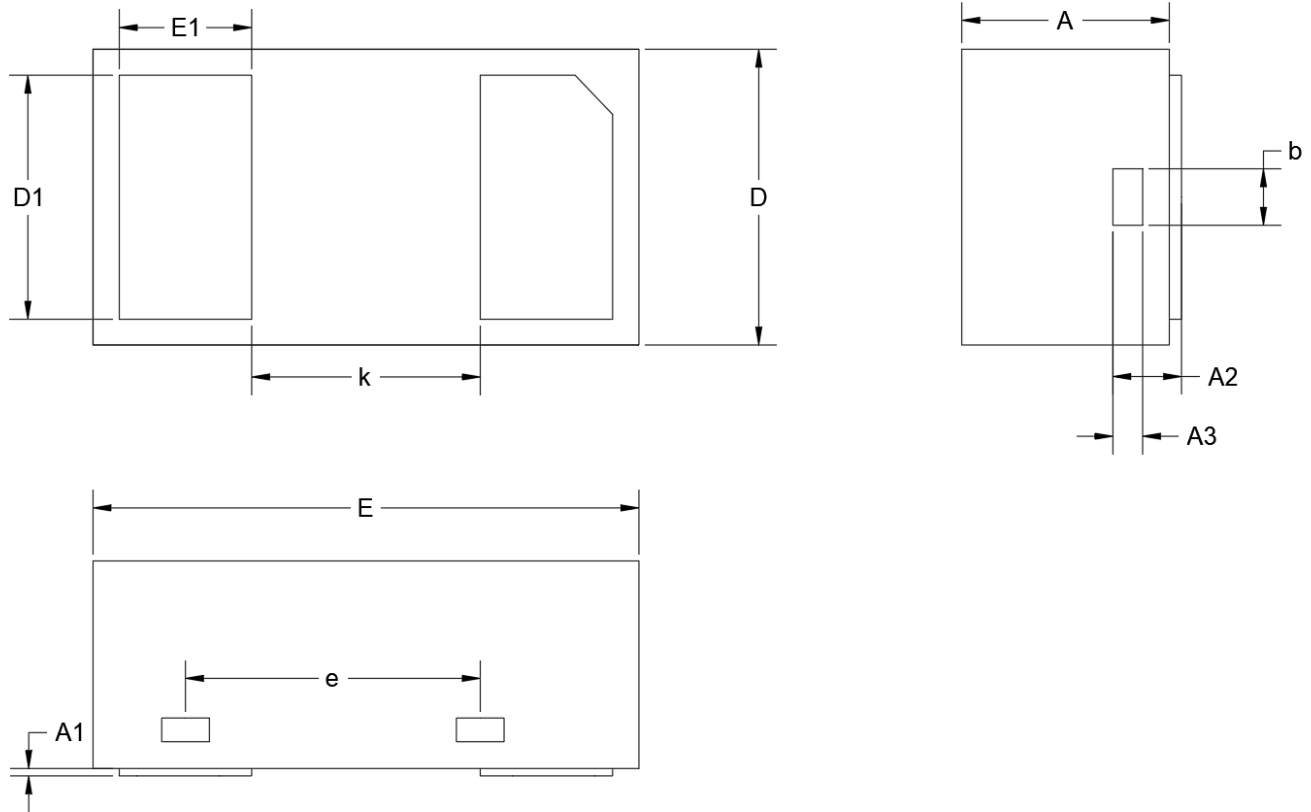


■ Typical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise Specified)





■ Outline Drawing – DFN1006-2L



Unit: mm

Symbol	Min	Nom	Max
A	0.350	0.450	0.550
A1	0.000	0.020	0.050
A2	0.077	0.127	0.207
A3	0.013	0.063	0.113
b	0.070	0.120	0.200
D	0.500	0.600	0.700
D1	0.400	0.500	0.600
D2	0.200	0.300	0.400
E	0.900	1.000	1.100
E1	0.150	0.250	0.350
e	0.360	0.410	0.460
k	0.300	0.400	0.500