

Features

- Fast response time
- Low reverse clamping voltage
- Low leakage current

Application

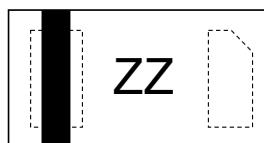
- Computers and peripherals
- Digital Cameras
- Audio and video equipment
- Cellular handsets and accessories
- Portable electronics



DFN1006-2L view



Schematic diagram



Marking and pin assignment



Pb-Free



RoHS



Halogen-Free

Absolute Maximum rating

Over operating free-air temperature range (unless otherwise noted)

Symbol	Parameter	Value	Unit
$P_{PP}^{(2)}$	Peak Pulse Power	240	W
$I_{PP}^{(2)}$	Peak Pulse Current	3.0	A
T_L	Lead Solder Temperature – Maximum (10 Second Duration)	260	°C
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C
$V_{ESD}^{(1)}$	IEC 61000-4-2 ESD Voltage Air Model	±8	kV
	IEC 61000-4-2 ESD Voltage Contact Mode	±8	kV
	JESD22-A114-B ESD Voltage Per Human Body Model	±15	kV
	ESD Voltage Machine Mode	±0.4	kV

(1).Device stressed with ten non-repetitive ESD pulses.

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

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
ESD36VF1	DFN1006-2L	ZZ	10,000	150,000	600,000	7"reel

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

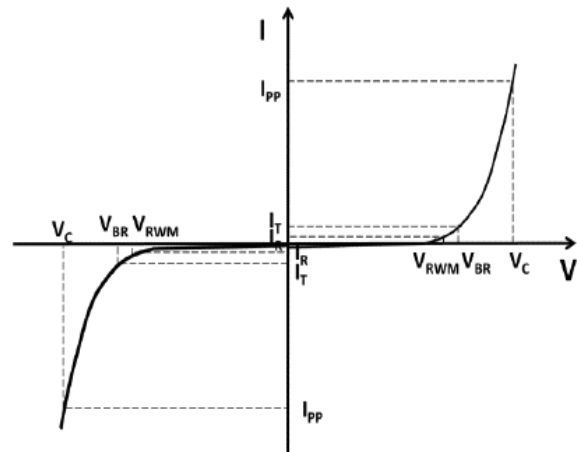
Device Type	V_{RWM} (Volts)	$I_R @ V_{RWM}$ (μA)	$V_{BR} @ I_T$ (Note 1) (Volts)		$V_C @ \text{Max } I_{PP+}$ (Volts)	$V_F @ I_F$ (Volts)	$C @ V_R = 0\text{V}, f = 1\text{MHz}$ (pF)
	MAX	MAX	MIN	MAX	MAX	MAX	MAX
ESD36VF1	36.0	1	40	48	80	0.9	30

(1).Other voltages available upon request.

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

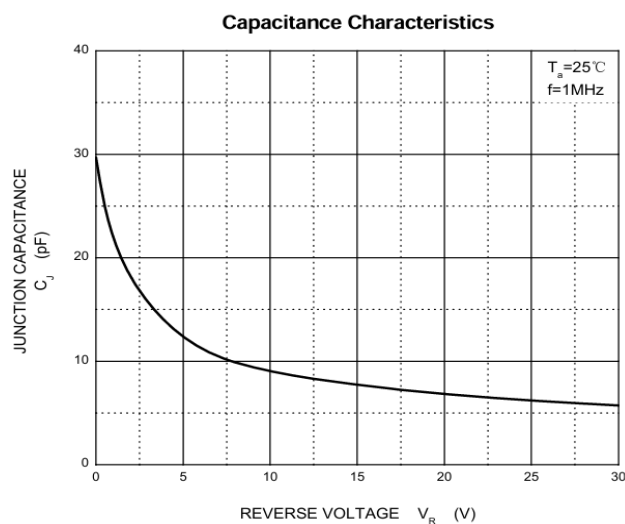
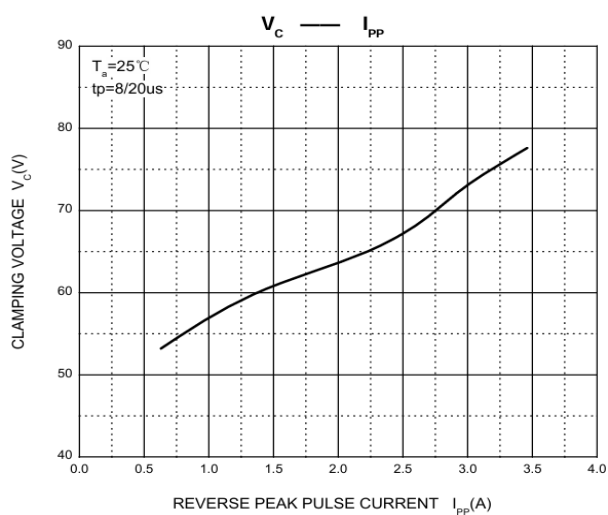
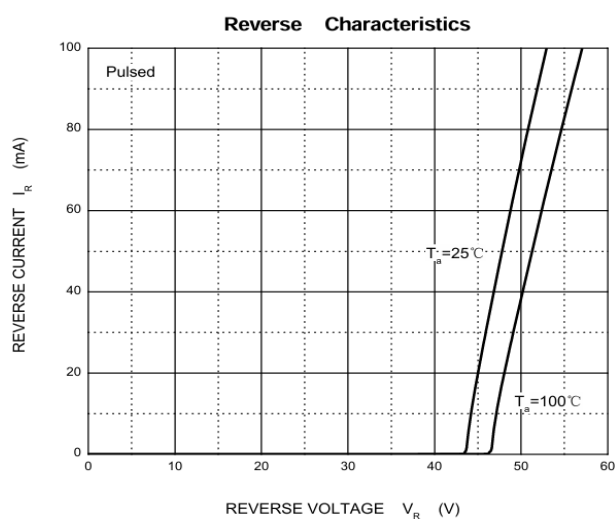
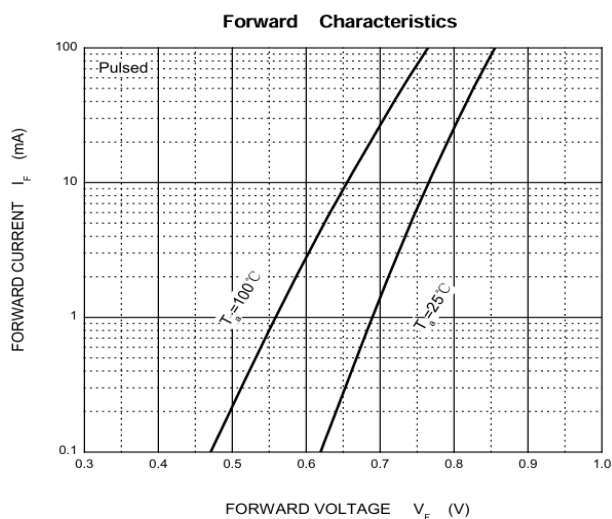
ELECTRICAL PARAMETER

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

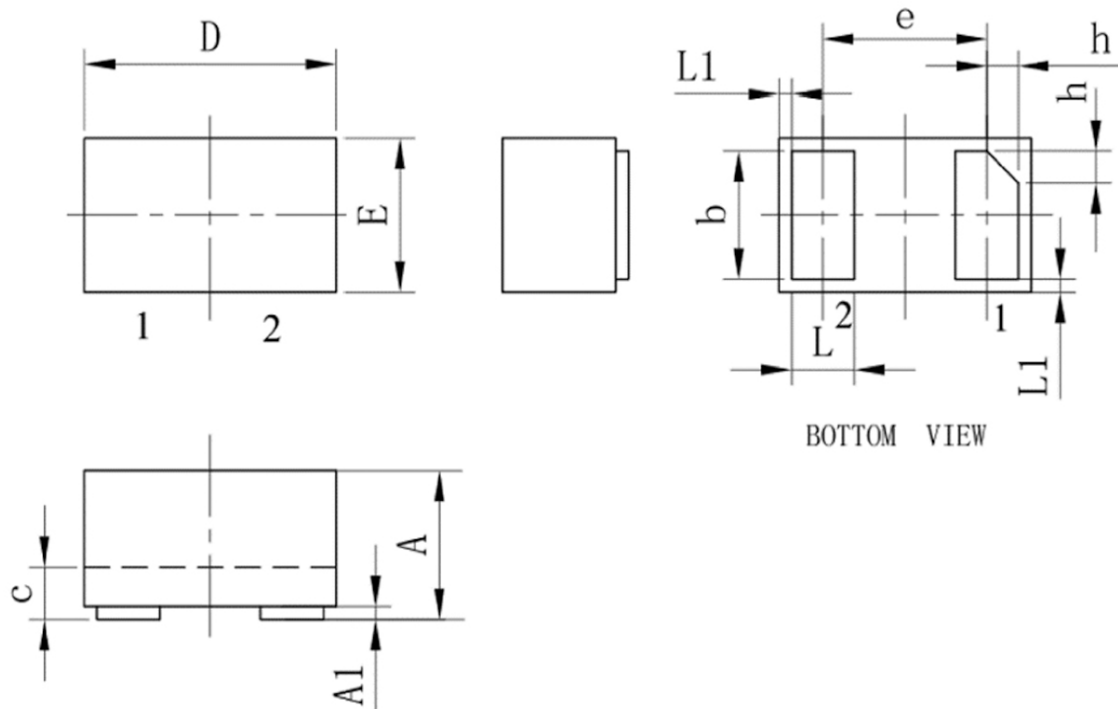


V-I characteristics for a uni-directional TVS

Typical Operating Characteristics



DFN1006-2L Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.450	0.550	0.018	0.022
A1	0.000	0.050	0.000	0.002
b	0.450	0.550	0.018	0.022
c	0.120	0.180	0.005	0.007
D	0.950	1.050	0.038	0.042
e	0.65BSC		0.026REF	
E	0.550	0.650	0.022	0.026
L	0.200	0.300	0.008	0.012
L1	0.05REF		0.005REF	
h	0.070	0.170	0.003	0.007