

Features

- 90W (tp=8/20μs) Peak Pulse Power
- Bi-directional configurations
- Low clamping voltage
- Low leakage current
- Low Capacitance ESD Protection
- Moisture sensitivity level: Level 1
- Solid-state silicon avalanche technology
- Meet IEC61000-4-2

Contact discharge ±15kV

Air discharge ±20kV



Applications

- Video I/O ports protection
- Set Top Boxes
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Pagers Peripherals

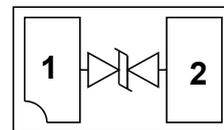
Meachanical Data

- DFN1006 (SOD882)package
- Molding compound flammability rating: UL94V-0
- Packaging: Tape and Reel(7 inch)

Agency Approvals

Icon	Description
RoHS	Compliance with (EU)2015/863
HF	Compliance with IEC61249-2-21:2003
	Mean lead free

Schematic & PIN Configuration



Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Peak Pulse Power($t_p=8/20\mu s$)	P_{PK}	90	W
Peak Pulse Current($t_p=8/20\mu s$)	I_{PP}	5	A
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}C$
Operating Temperature	T_J	-55 to +125	$^{\circ}C$
Storage Temperature	T_{STG}	-55 to +150	$^{\circ}C$

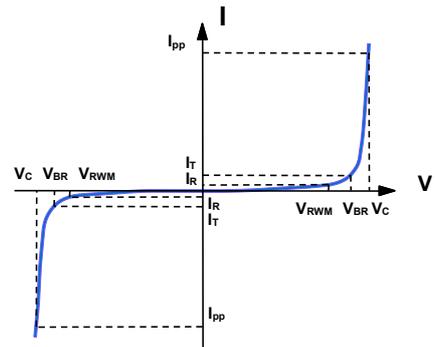
Electrical Characteristics (TA=25 $^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	$I_T = 1mA$	6	6.8	8.5	V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$			0.1	μA
Clamping Voltage	V_C	$I_{PP} = 1A, t_p=8/20\mu s$			11	V
Clamping Voltage	V_C	$I_{PP} = 5A, t_p=8/20\mu s$			25	V
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$		0.25	0.55	pF

I-V Curve Characteristics

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

Note: 8/20 μs pulse waveform.



Characteristics Curves(TA=25°C unless otherwise Specified)

Fig 1. 8/20µs Pulse Waveform

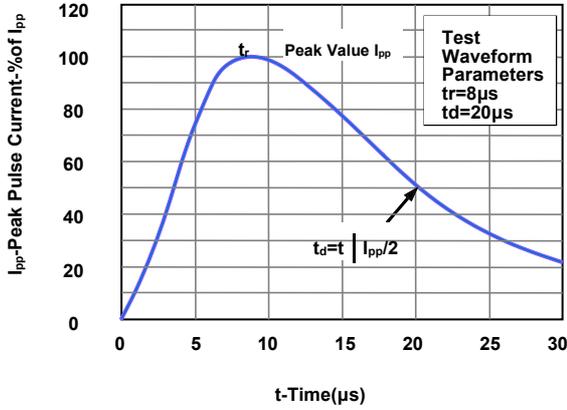


Fig 2. ESD Pulse Waveform (according to IEC61000-4-2)

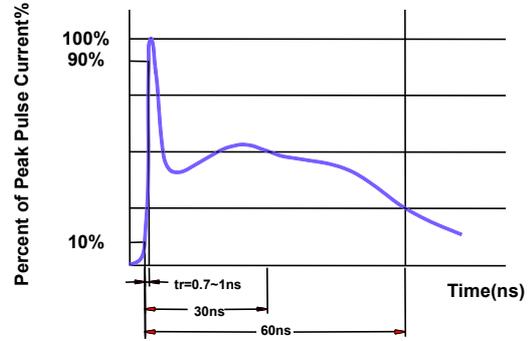


Fig 3. Power Derating Curve

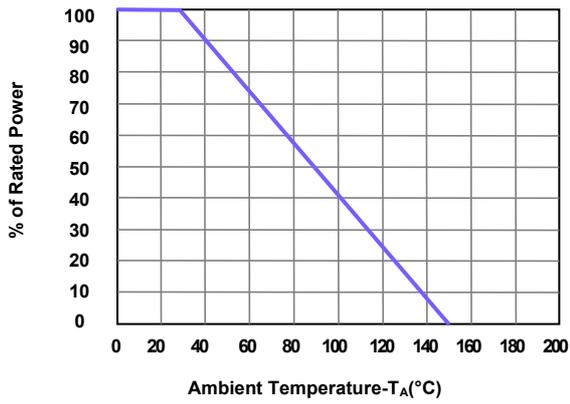
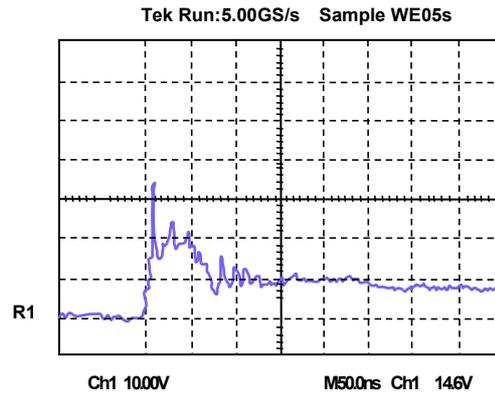
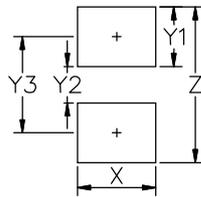
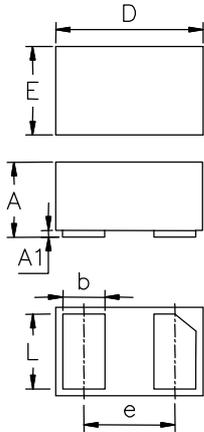


Figure 4.ESD Clamping(8KV Contact per IEC61000-4-2)



DFN1006(SOD882) Package Outline



Land Pattern

DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.45	0.55	0.018	0.022
A1	-	0.05	-	0.002
D	0.95	1.05	0.037	0.041
E	0.55	0.65	0.022	0.026
b	0.20	0.30	0.008	0.012
L	0.45	0.55	0.018	0.022
e	0.65 BSC		0.026 BSC	
X	0.60		0.024	
Y1	0.50		0.020	
Y2	0.30		0.012	
Y3	0.80		0.032	
Z	1.30		0.052	

Marking Information



Packaging Information

	Reel	Inner Box	Carton
Size	φ178mm(7 inch)	215×205×205mm	435×435×230mm
Quantity	MPQ/MOQ: 1 reel=10000pcs	1 Inner box=10 reels=100,000pcs	1Carton=4 Inner boxes=400,000pcs
Photos			

Notice: 1、 Each reel is placed in an aluminum foil bag and vacuum-packed separately.

2、 Above packaging photos make from 3D software for reference only, please refer to actual product as the standard.