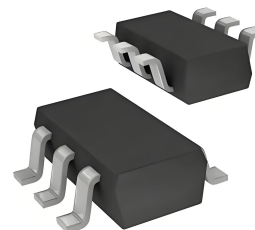


Features

- 240W ($t_p=8/20\mu s$) Peak Pulse Power per Line
- Ultra low leakage: nA level
- Up to 4 lines and one power line protects
- Low clamping voltage
- Low Leakage Current
- Moisture sensitivity level: Level 1
- Meet IEC61000-4-5(Lighting) 16A(8/20 μs)
- Meet IEC61000-4-2
- Contact discharge $\pm 30kV$
- Air discharge $\pm 30kV$



Applications

- USB 2.0 / USB 3.0 Interfaces
- Micro controller Input Protection
- Ethernet Interface
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Industrial Controls
- Peripherals

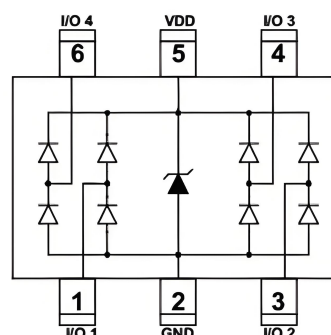
Meachanical Data

- SOT23-6(SOT-26)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}	240	W
Peak Pulse Current($t_p=8/20\mu s$)	I_{PP}	16	A
Lead Soldering Temperature	T_L	260(10seconds)	°C
Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

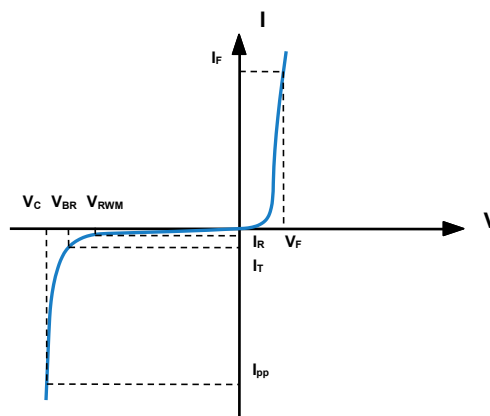
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V_{RWM}	Any I/O Pin to ground			5	V
Breakdown Voltage	V_{BR}	$I_T = 1mA$, any I/O Pin to ground	6			V
Reverse Leakage Current	I_R	$V_{RWM} = 5V$, any I/O Pin to ground			0.5	μA
Forward Voltage	V_F	$I_F = 15mA$, ground to Pin 1,3,4,5,6			1.2	V
Forward Voltage	V_F	$I_F = 15mA$, Pin 1,3,4,6 to Pin 5			1.2	V
Clamping Voltage	V_C	$I_{PP} = 1A$, $t_p=8/20\mu s$, any I/O Pin to ground			12	V
Clamping Voltage	V_C	$I_{PP} = 16A$, $t_p=8/20\mu s$, any I/O Pin to ground			15	V
Junction Capacitance	C_J	$V_R = 0V$, $f = 1MHz$, between I/O pins		1.5		pF
Junction Capacitance	C_J	$V_R = 0V$, $f = 1MHz$, any I/O Pin to ground		3.0	5.0	pF

Note 1: I/O pins are Pin 1, 3, 4 and 6

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
I_F	Forward Current
V_F	Forward Voltage @ I_F

Note: 8/20 μs pulse waveform.



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

Fig 1. 8/20μs Pulse Waveform

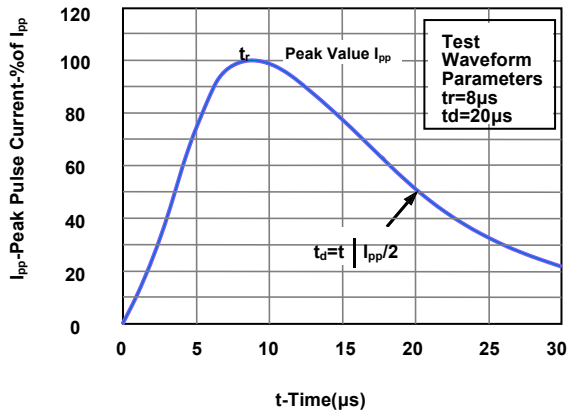


Figure 2. Clamping Voltage vs. I_{pp}

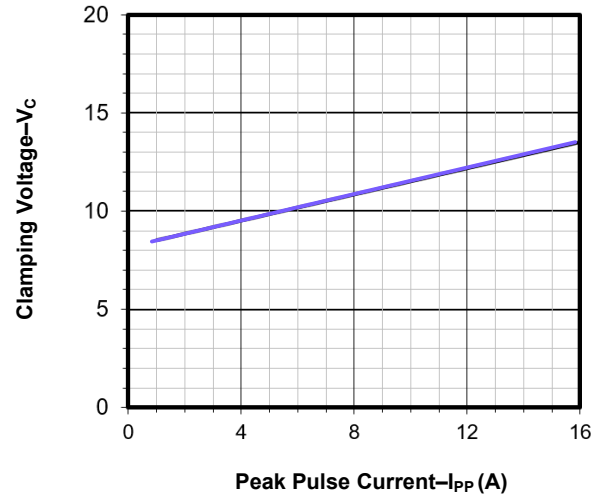


Fig 3. Junction Capacitance vs. Reverse Voltage

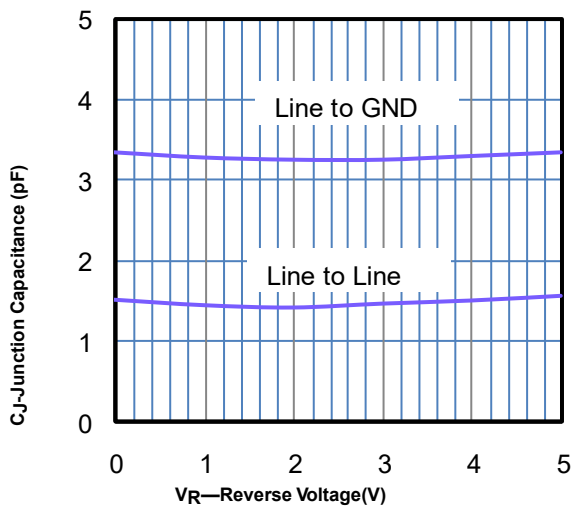


Fig 4. Peak Pulse Power vs. Pulse Time

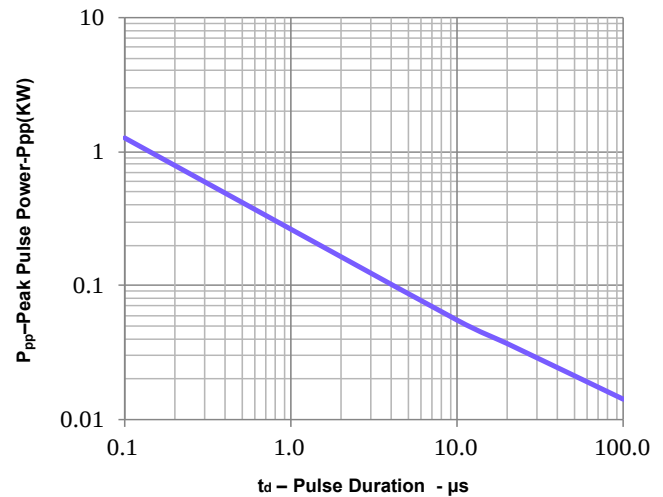
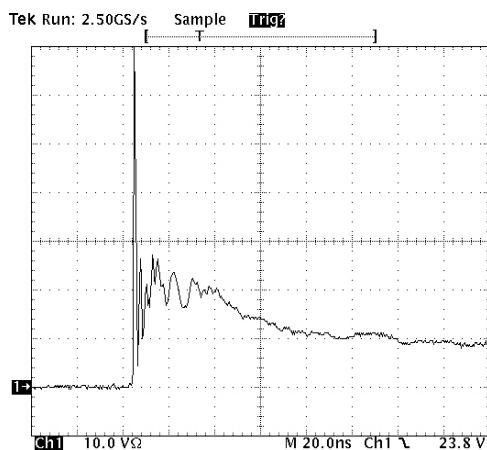
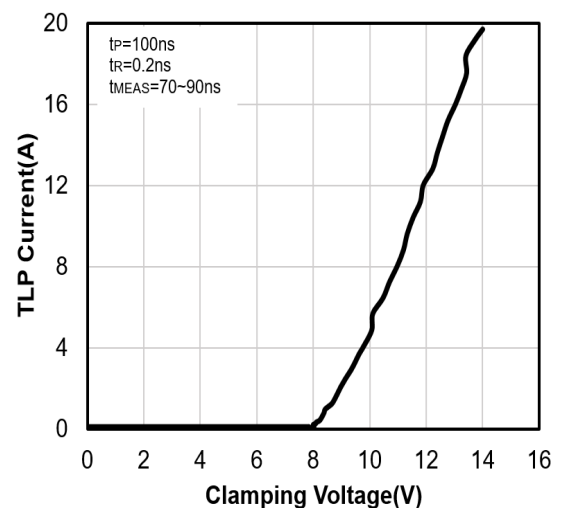


Figure 5. ESD Clamping(8KV Contact per IEC61000-4-2)

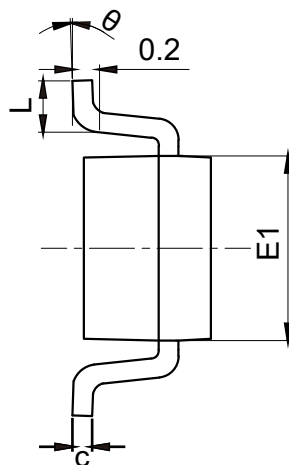
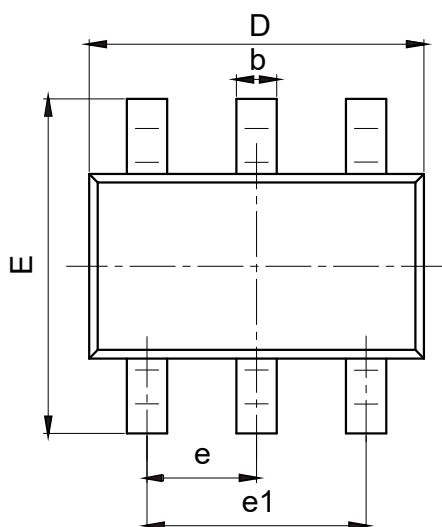


Note: Data is taken with a 10x attenuator

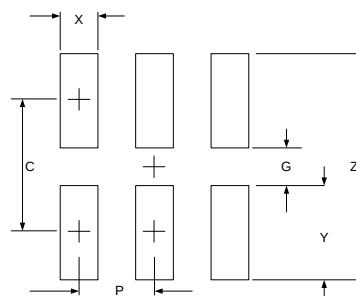
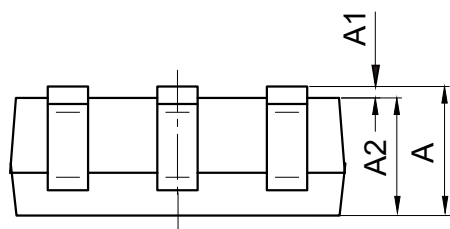
Fig 6. Power Derating Curve



SOT23-6(SOT-26)Package Outline

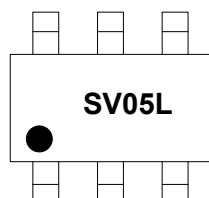


Symbol	Millimeters	
	Min	Max
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.300	0.500
c	0.100	0.200
D	2.820	3.020
E1	1.500	1.700
E	2.650	2.950
e	0.950(BSC)	
e1	1.800	2.000
L	0.300	0.600
θ	0°	8°



SYM	DIMENSIONS
	MILLIMETERS
C	2.50
G	1.40
P	0.95
X	0.60
Y	1.10
Z	3.60

Marking Information



SV05L = Device Marking Code

Suggested Land Pattern

Packaging Information

	Reel	Inner Box	Carton
Size	φ178mm(7 inch)	215×205×205mm	435×435×230mm
Quantity	MPQ/MOQ: 1 reel=3000pcs	1 Inner box=10 reels=30,000pcs	1Carton=4 Inner boxes=120,000pcs
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.