



SD4V5HHU

Single Line Uni-directional Transient Voltage Suppressor

Features

- 5000 Watts peak pulse power($t_p=8/20\mu s$)
- Low leakage current
- Low clamping voltage
- Solid-state silicon-avalanche technology
- RoHS compliant

Applications

- Power lines
- Personal digital assistants(PDA's)
- Microprocessors based equipment
- Notebooks, desktops and servers
- Cell phone handsets and accessories
- Portable electronics
- Peripherals

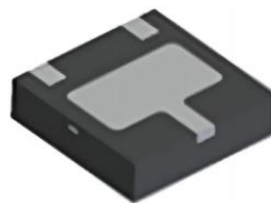
Marking:93P

Absolute Maximum Ratings

Parameter	Symbol	SS34FL	Unit
Peak Pulse Power Dissipation at 8/20 μs Waveform	P _{PP}	5000	W
ESD per IEC 61000-4-2(Air)	V _{ESD}	±30	kV
ESD per IEC 61000-4-2(Contact)		±30	
Lead Soldering Temperature	T _L	260(10 sec.)	°C
Operating Junction Temperature Range	T _J	-55~+125	°C
Storage Temperature Range	T _{STG}	-55~+150	°C

Electrical Characteristics(T_A=25°C)

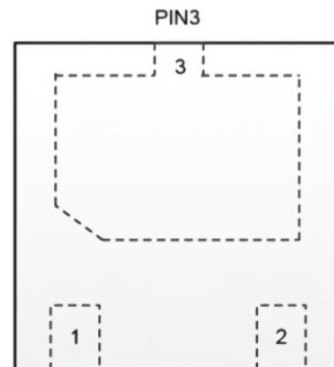
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}				4.5	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	4.8			V
Reverse Leakage Current	I _R	V _{RWM} =4.5V			1	μA
Clamping Voltage	V _C	I _{PP} =50A, $t_p=8/20\mu s$			10	V
		I _{PP} =100A, $t_p=8/20\mu s$			15	V
		I _{PP} =280A, $t_p=8/20\mu s$			30	V
Junction Capacitance	C _J	V _{RWM} =0V, f=1MHz		700	1000	pF



DFN2x2-3L



Circuit Diagram



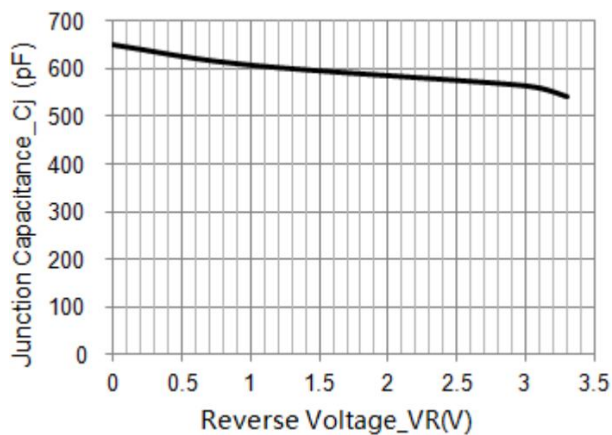
Pin Configuration

Protection Solution To Meet

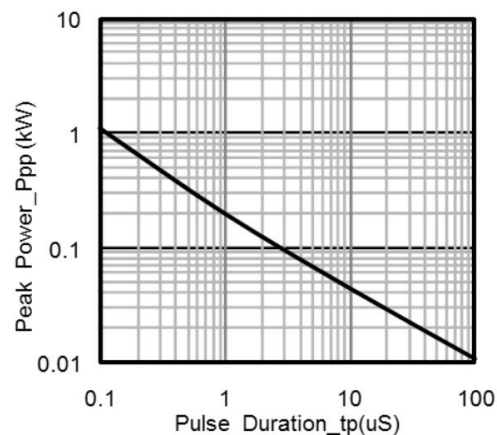
- IEC61000-4-2(ESD) ±30kV (air), ±30kV (contact)
- IEC61000-4-4(EFT) 40A (5/50ns)
- IEC61000-4-5(Lightning) 280A (8/20 μs)



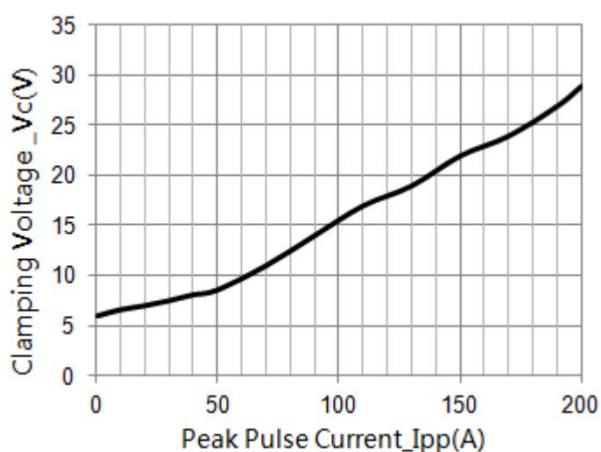
Typical Characteristics



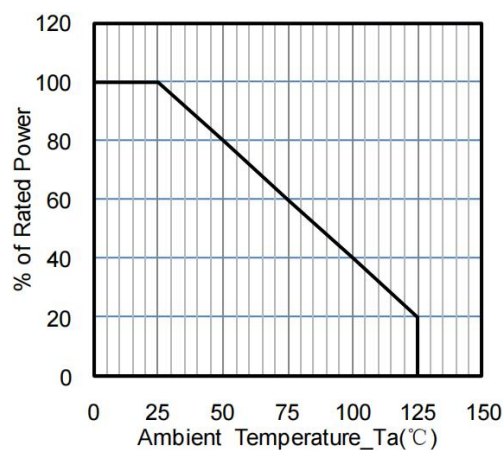
Junction Capacitance vs. Reverse Voltage



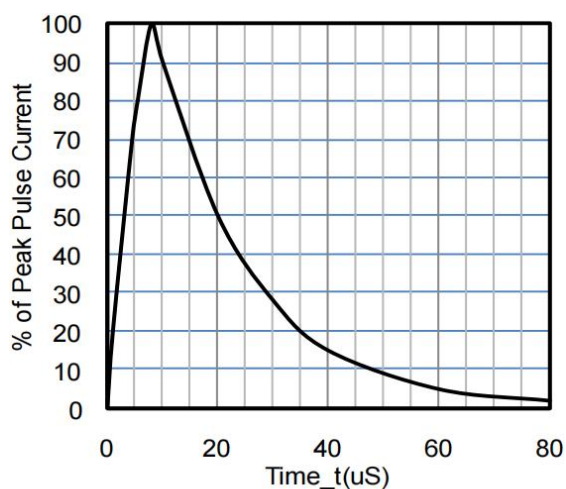
Peak Pulse Power vs. Pulse Time



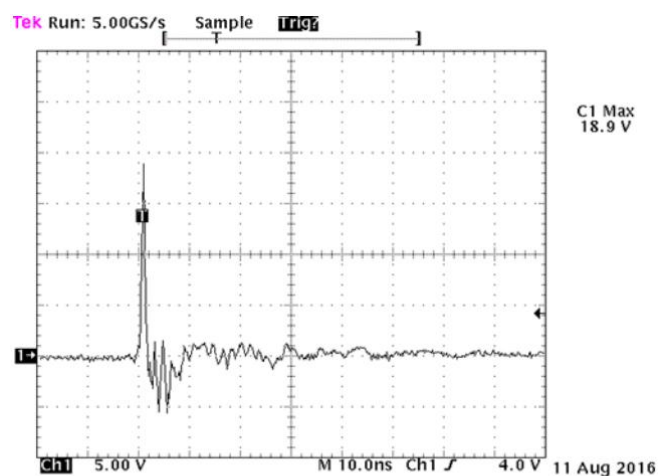
Clamping Voltage vs. Peak Pulse Current



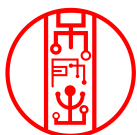
Power Derating Curve



8 X 20us Pulse Waveform



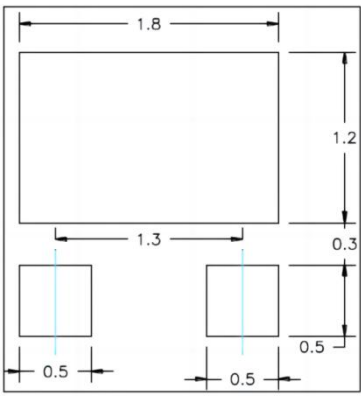
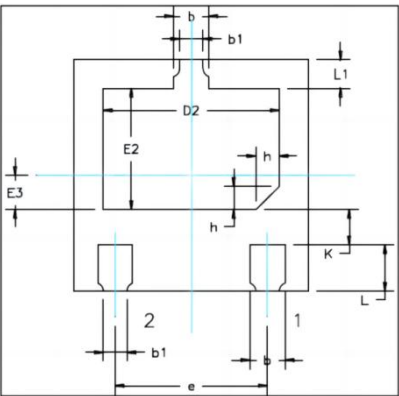
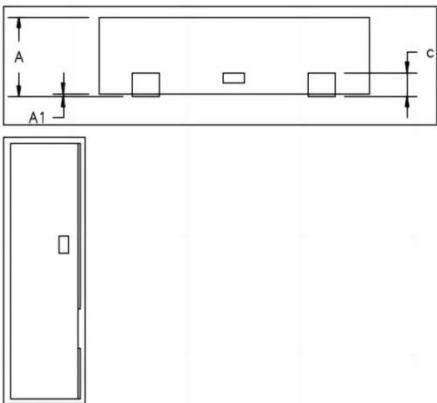
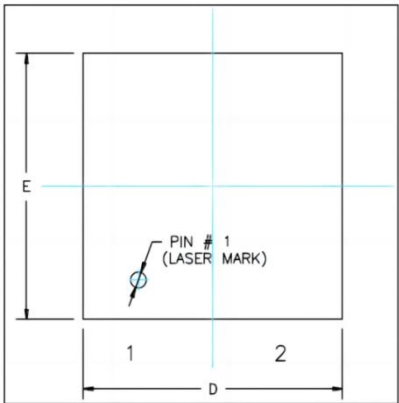
ESD Clamping Voltage



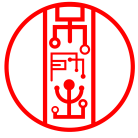
Package Information

DFN2x2-3L

Dimensions in mm



Symbol	Millimeters		
	min	nom	max
A	0.50	0.55	0.60
A1	0.00	0.02	0.05
b	0.25	0.30	0.35
b1	0.2 REF		
c	0.152 REF		
D	1.90	2.00	2.10
D2	1.40	1.50	1.60
e	1.30 BSC		
E	1.90	2.00	2.10
E2	0.95	1.05	1.15
E3	0.20	0.30	0.40
L	0.35	0.40	0.45
L1	0.20	0.25	0.30
h	0.2 REF		
K	0.20	0.30	0.40



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