EVVOSEMI®
THINK CHANGE DO

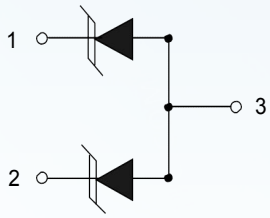
ESD TVS MOS LDO Diode Sensor DC-DC

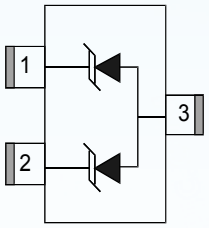
Product Specification

Domestic Part Number	ESDA5V3L
Overseas Part Number	ESDA5V3L
Equivalent Part Number	ESDA5V3L

Features

- 350Wat tspeakpuls epower(t p=8/20μs)
- Bidirectionalandunidirectionalconfigurations
- Solid-statesilicon-avalanchetechnology
- Low clampingvoltage
- Low leakage current
- IEC 61000-4-2 ±30kV contact ±30kV air
- IEC 61000-4-4 (EFT) 40A(5/50ns)
- IEC610 00-4-5(Lightning)2 4A(8/20μs）





SOT-23 (Top View)

Applications

- Dataline
- Automatic Teller Machines
- Net works
- Power line

Mechanical Data

- SOT-23 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel

AbsoluteMaximumR ating

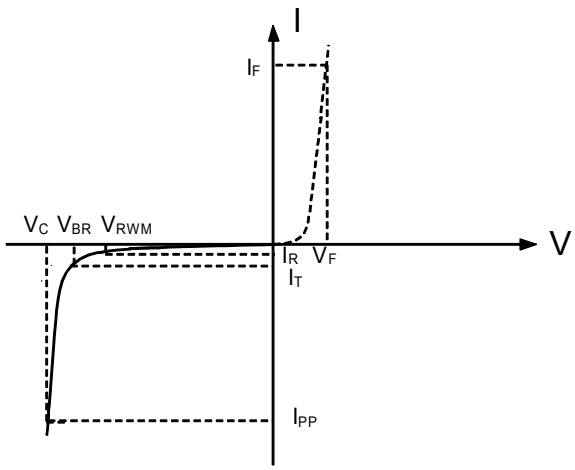
Rating	Symbol	Value	Units
PeakPuls ePower(t_p=8/20μs)	P_{PP}	350	Watts
PeakPuls eCurrent(t_p=8/20μs)(note1)	I_{pp}	24	A
ESDper IEC610 00-4-2 (Air) ESDper IEC610 00-4-2 (Contact)	V_{ESD}	30 30	kV
Lead Soldering Temperature	T_L	260(10seconds)	℃
Junction Temperature	T_J	-55 to + 125	℃
Storage Temperature	T_{stg}	-55 to + 125	℃

Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				3.0	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	4.0	6.5	8.0	V
Reverse Leakage Current	I_R	V_{RWM}=3V,T=25℃		0.1	0.5	μA
Peak Pulse Current	I_{PP}	tp =8/20μs			24	A
Clamping Voltage	V_C	I_{PP}=24A,t_p=8/20μs			16	V
Junction Capacitance	C_j	V_R = 0V, f = 1MHz (pin 1、pin2 to pin 3)		200		pF

ElectricalParameters (TA=25°Cunlessotherw isenot ed)

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



Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

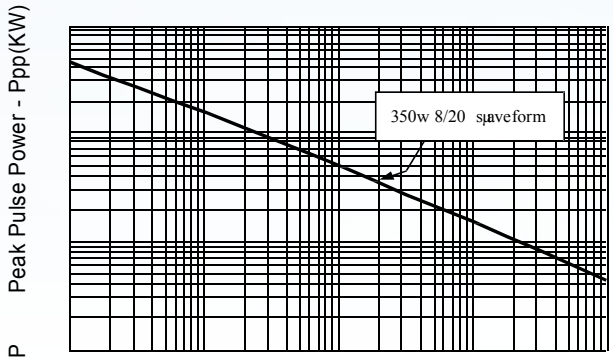


Figure 2: Power Derating Curve

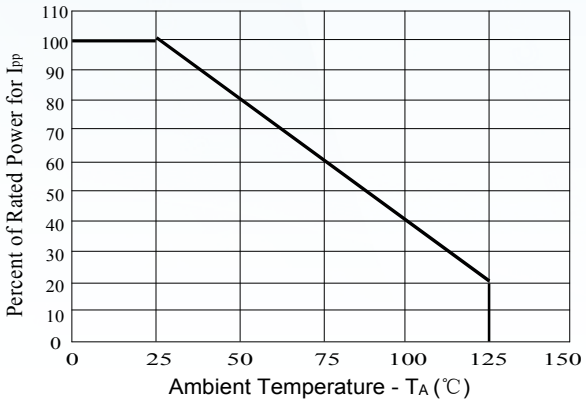


Figure3: Pulse Waveform

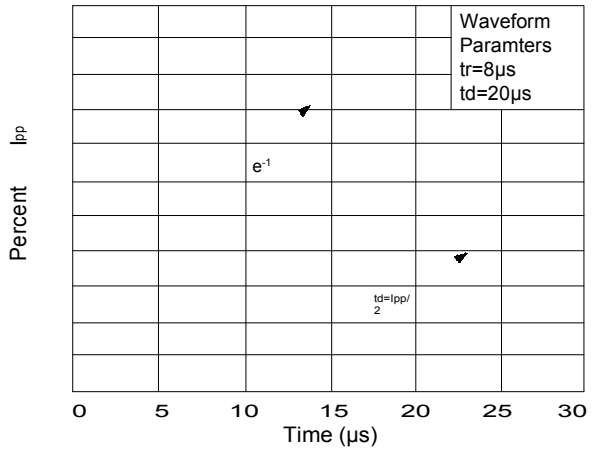
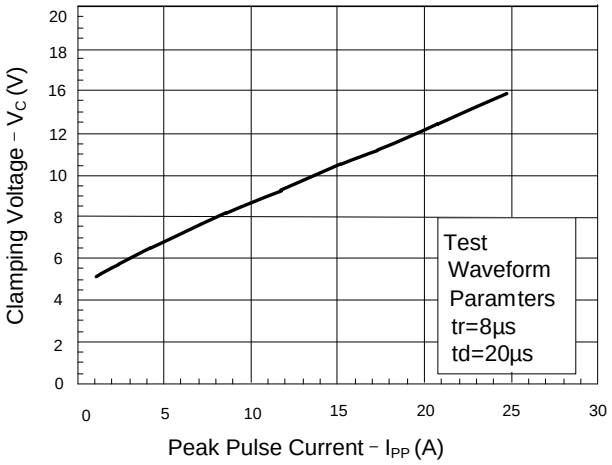
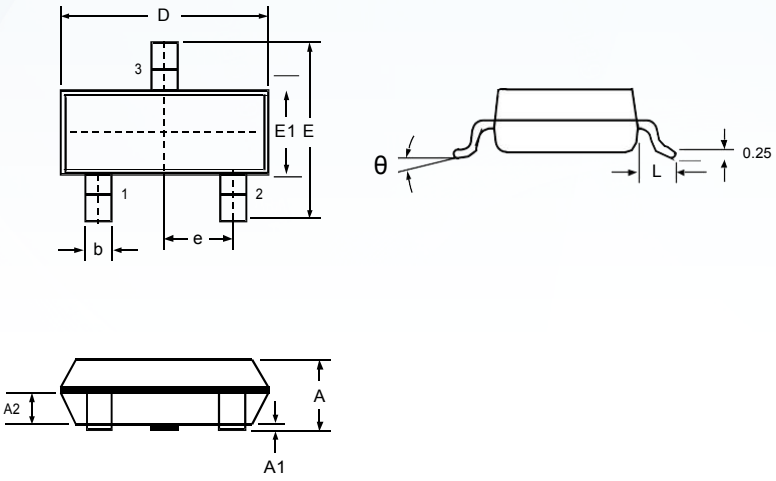


Figure 4: Clamping Voltage vs.Ipp

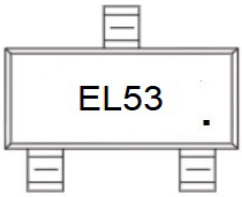


Outline Drawing – SOT-23



DIMENSIONS				
SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
D	2.800	3.000	0.110	0.118
b	0.300	0.500	0.012	0.020
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
e	0.950 BSC		0.037 BSC	
L	0.500	0.675	0.020	0.027
θ	0	8°	0	8°

Marking



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