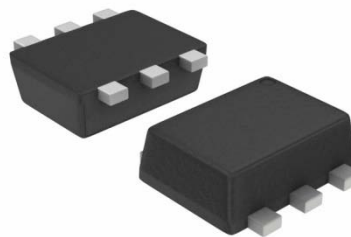


# SESLC5VT563-6U

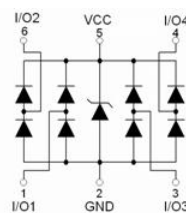
## Low Capacitance ESD Protection Diode

### Features

- Uni-directional ESD protection of four lines
- Low capacitance: 0.8pF(max)
- Low reverse clamping voltage
- Low leakage current
- IEC 61000-4-2 Level 4 ESD protection
- SOT-563 package
- RoHS compliant



**SOT-563**



**Schematic Diagram**

### Applications

- Digital Visual Interface (DVI)
- LVDS
- USB 2.0
- High Definition Multi-Media Interface (HDMI)

### Maximum Ratings

(T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
IEC 61000-4-2 ESD Voltage(I/O to GND & V <sub>CC</sub> to GND)	V <sub>ESD</sub> <sup>(1)</sup>	Air Model	±25
		Contact Model	±25
		Per Human Body Model	±16
		Machine Model	±0.4
JESD22-A114-B ESD Voltage(I/O to GND & V <sub>CC</sub> to GND)			
ESD Voltage(I/O to GND & V <sub>CC</sub> to GND)			
Peak Pulse Power	P <sub>PP</sub> <sup>(2)</sup>	125	W
Peak Pulse Current	I <sub>PP</sub> <sup>(2)</sup>	5	A
Lead Solder Temperature – Maximum (10 Second Duration)	T <sub>L</sub>	260	°C
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ +150	°C

(1).Device stressed with ten non-repetitive ESD pulses, Per channel(I/O to GND).

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

### Electrical Characteristics

(T<sub>A</sub>=25°C unless otherwise specified)

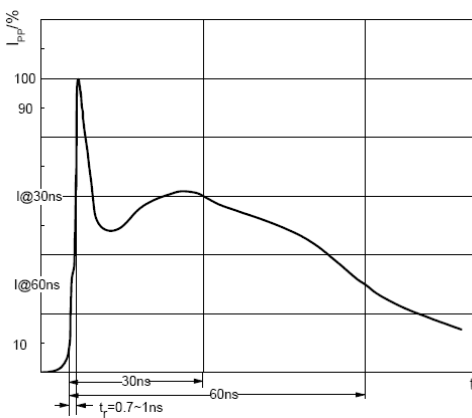
Parameter	Symbol	Test conditions	Min	Max	Unit
Per channel(I/O to GND unless otherwise specified)					
Reverse Stand-off Voltage	V <sub>RWM</sub> <sup>(1)</sup>		-	5	V
Breakdown Voltage	V <sub>(BR)</sub>	I <sub>T</sub> =1mA	6.5	8.8	V
		I <sub>T</sub> =1mA V <sub>CC</sub> to GND	5.8	8.1	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =5V (I/O to GND & V <sub>CC</sub> to GND)	-	1	μA
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA (I/O to GND & V <sub>CC</sub> to GND)	0.5	1.0	V
Clamping Voltage	V <sub>C</sub> <sup>(2)</sup>	I <sub>PP</sub> =1A (I/O to GND & V <sub>CC</sub> to GND)	-	15	V
		I <sub>PP</sub> =5A (I/O to GND & V <sub>CC</sub> to GND)	-	25	V
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V,f=1MHz	-	0.8	pF
		V <sub>R</sub> =0V,f=1MHz, I/O to I/O	-	0.4	pF

(1).Other voltages available upon request.

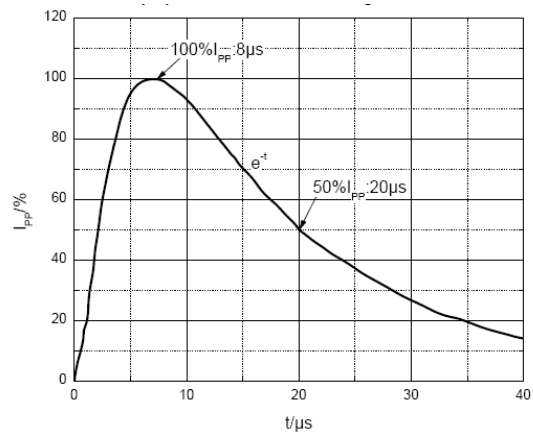
(2).Non-repetitive current pulse 8/20μs exponential decay waveform according to IEC61000-4-5

### Typical Characteristic Curves

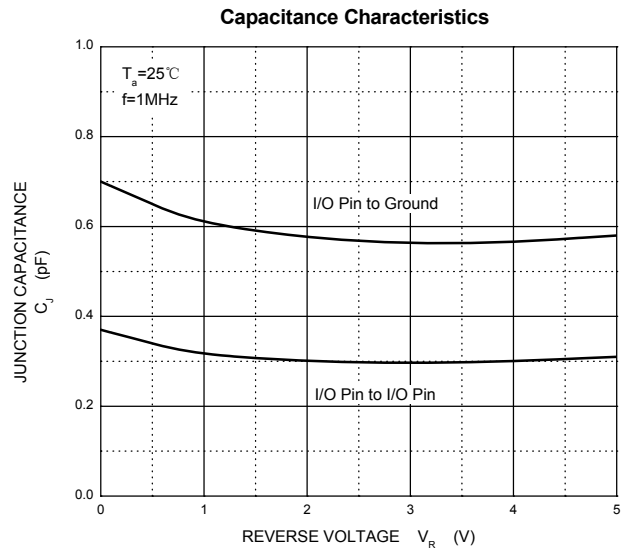
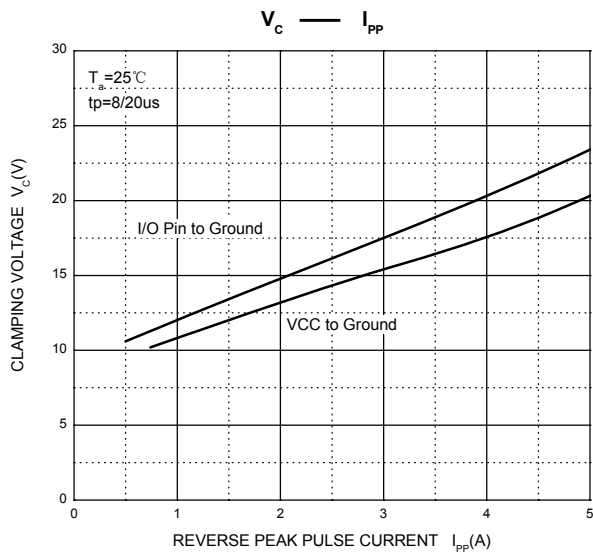
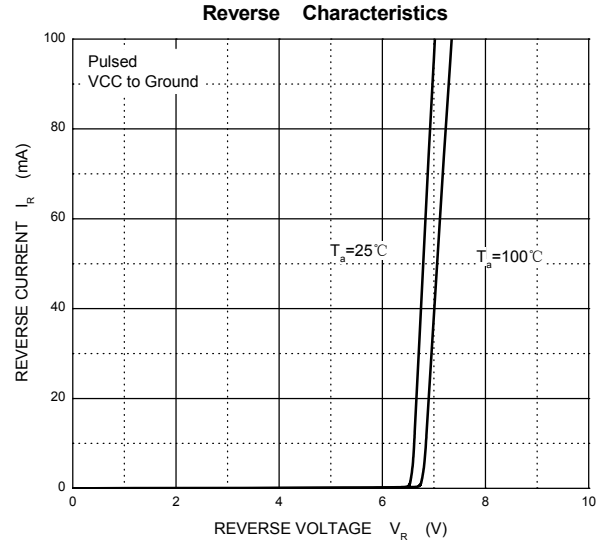
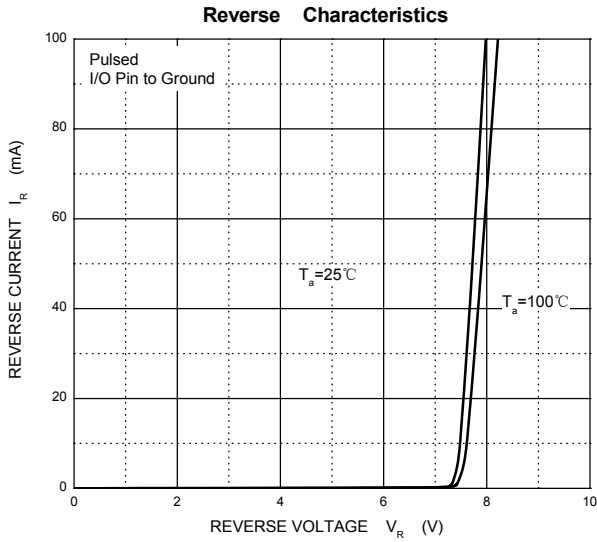
ESD pulse waveform according to IEC61000-4-2



8/20μs pulse waveform according to IEC 61000-4-5

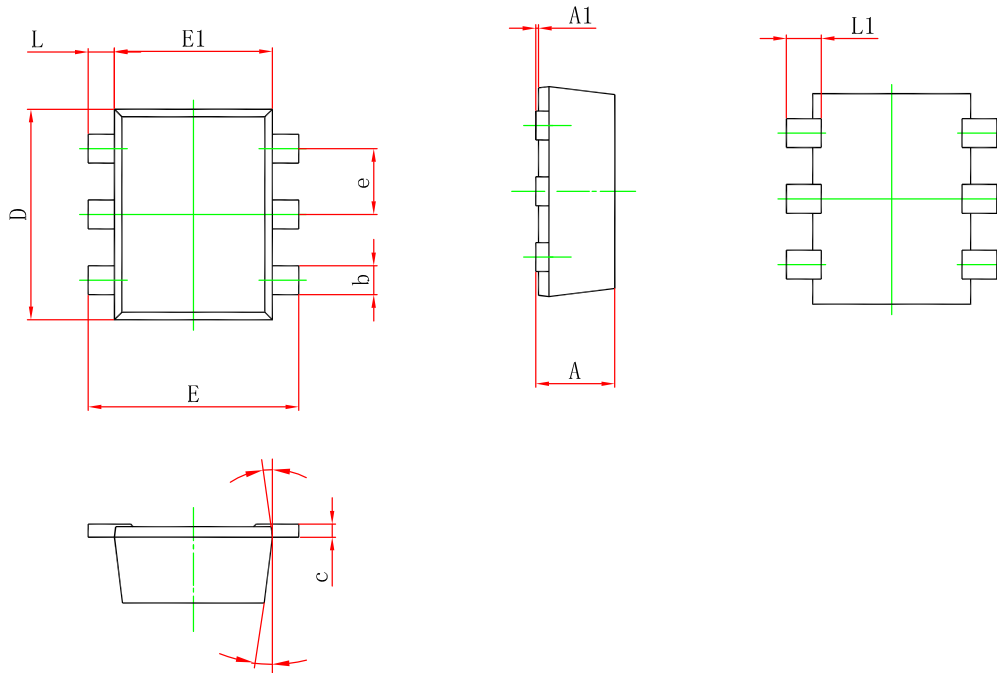


**Typical Characteristic Curves**



**Product Dimensions**

SOT-563



Symbol	Dimensions In Millimeters		Dimensions in inches	
	Min.	Max.	Min.	Max.
A	0.525	0.600	0.021	0.024
A1	0.000	0.050	0.000	0.002
e	0.450	0.550	0.018	0.022
c	0.090	0.160	0.004	0.006
D	1.500	1.700	0.059	0.067
b	0.170	0.270	0.007	0.011
E1	1.100	1.300	0.043	0.051
E	1.500	1.700	0.059	0.067
L	0.100	0.300	0.004	0.012
L1	0.200	0.400	0.008	0.016
0	7 °REF.		7 °REF.	

**Order Information**

Device	Package	Marking	Carrier	Quantity	HSF Status
SESLC5VT563-6U	SOT-563	U5N4	Tape & Reel	3000pcs/Reel	RoHS compliant