

RoHS Compliant Product

DESCRIPTION

The SSESDL05-C is designed to protect voltage sensitive components that require ultra-low capacitance from ESD and transient voltage events. Excellent clamping capability, low capacitance, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium. Because of its low capacitance, it is suited for use in high frequency designs such as USB 2.0 high speed and antenna line applications.

APPLICATIONS

- Cellular phones / Audio
- Portable devices
- Digital cameras
- Power supplies

FEATURES

- Small body outline dimensions
- QUALIFIED MAX REFLOW TEMPERATURE:260°C
- Device Meets MSL 1 Requirements
- LEAD FINISH:100% Matte Sn (Tin)

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-923	8K	7 inch

MARK CODE



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

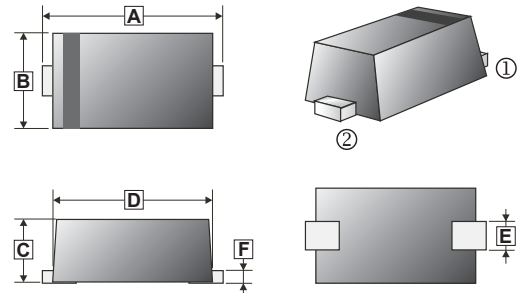
Rating		Symbol	Value	Units
Total Power Dissipation on FR-5 Board @ T _A =25°C ¹		P _D	150	mW
Lead Solder Temperature -Maximum (10 second Duration)		T _L	260	°C
Junction and Storage Temperature Range		T _J , T _{STG}	-55~150	°C
IEC61000-4-2 (ESD)	Air discharge		±15	KV
	Contact discharge		±10	

Note:

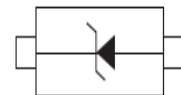
1. Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

2. FR-5 = 1.0*0.75*0.62 in.

SOD-923



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.95	1.05	D	0.75	0.85
B	0.55	0.65	E	0.15	0.25
C	0.34	0.43	F	0.07	0.17



ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted, $V_F=1\text{V}$ Max. @ $I_F=10\text{ mA}$ for all types)

Device	V_{RWM} (V)	$I_R(\mu\text{A})$ @ V_{RWM}	V_{BR} (V) @ I_T^1	I_T	V_C (V) @ $I_{PP}=1\text{A}^2$	V_C	C (pF)	
	Max.	Max.	Min.	mA	Max.	Per IEC61000-4-2	Typ.	Max.
SSESDL05-C	5	1	5.4	1	9.8	Figures 1 & 2 See Below	0.5	0.9

Note:

- V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C .
- Surge current waveform per Figure 3.

RATINGS AND CHARACTERISTICS CURVES

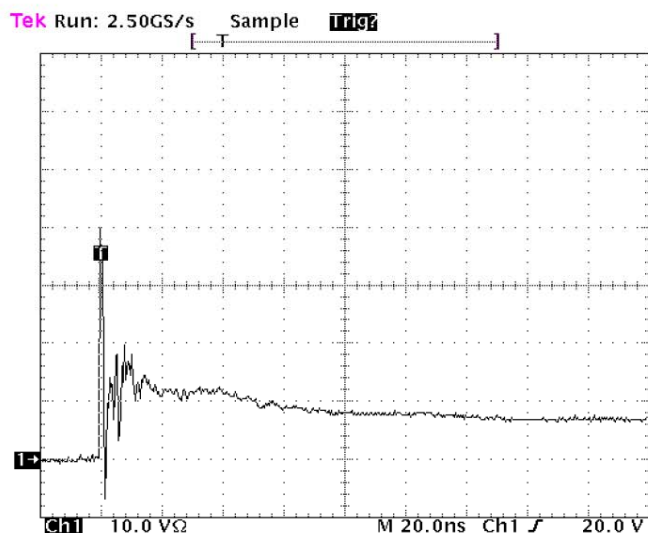


Figure 1. ESD Clamping Voltage Screenshot
Positive 8 kV Contact per IEC61000-4-2

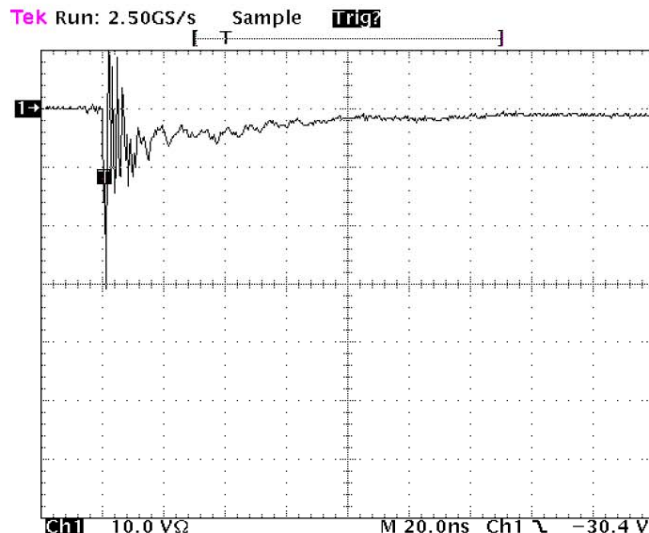


Figure 2. ESD Clamping Voltage Screenshot
Negative 8 kV Contact per IEC61000-4-2

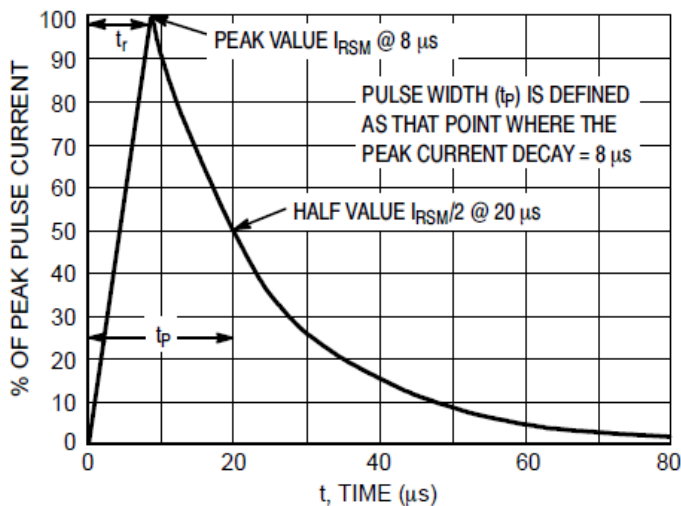


Figure 3. 8 X 20 μs Pulse Waveform