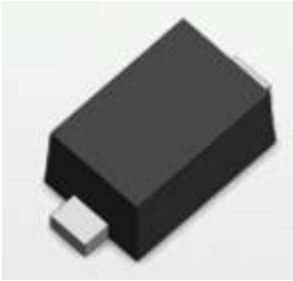
Leiditech

ESD5Z5L

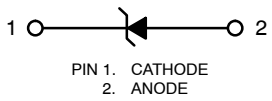
Features

- Ultra low leakage: nA level
- Operating voltage: 5V
- Low clamping voltage
- Complies with following standards:
  – IEC 61000-4-2 (ESD) immunity test
    Air discharge: ±10kV
    Contact discharge: ±15kV
  – IEC61000-4-4 (EFT) 40A (5/50ns)
  – IEC61000-4-5 (Lightning) 1A (8/20μs)
- RoHS Compliant

Dimensions SOD-523



Pin Configuration



PIN 1. CATHODE
2. ANODE

Applications

- USB 2.0 power and data line
- Set-top box and digital TV
- Digital video interface (DVI)
- Notebook Computers
- SIM Ports
- 10/100 Ethernet

Mechanical Characteristics

- Package: SOD-523
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0
- Quantity Per Reel:3,000pcs
- Reel Size:7 inch

Absolute Maximum Ratings(Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppp	200	W
ESD per IEC 61000−4−2 (Air)	V_{ESD}	± 10	Kv
ESD per IEC 61000−4−2 (Contact)		± 15	
Operating Temperature Range	T_J	-55 to +125	℃
Storage Temperature Range	T_{STJ}	-55 to +150	℃

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

Part Number	Device Marking	V_{RWM} (V)	V_{BR} (V)	I_T (mA)	V_C @1A	Vc		I_R μA (Max)	C (Pf) (Typ.)
						(Max)	(@A)		
ESD5Z5L	5L	5	5.4	1	9.8	9.8	1	1	0.5

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Typical Performance Characteristics (T_A=25°C unless otherwise Specified)

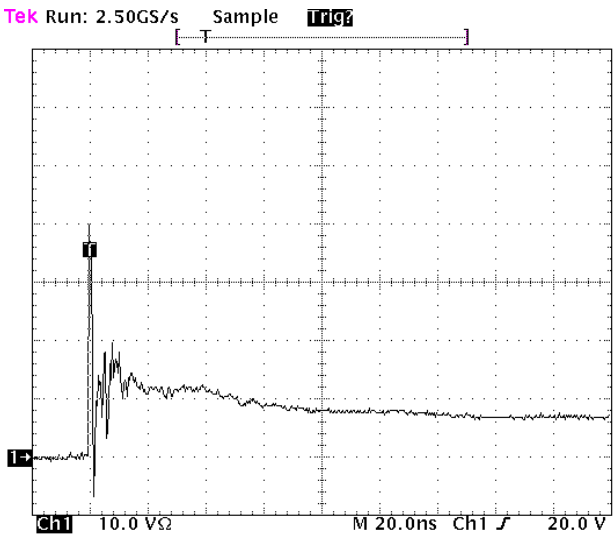


Figure 1. ESD Clamping Voltage Screenshot
Positive 8 kV Contact per IEC61000−4−2

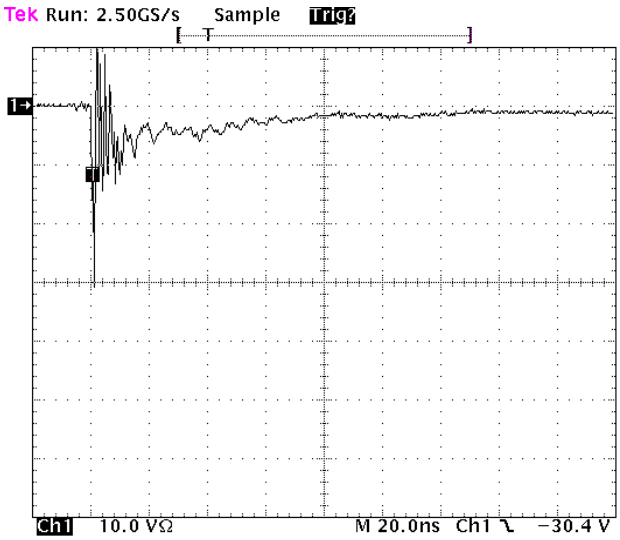
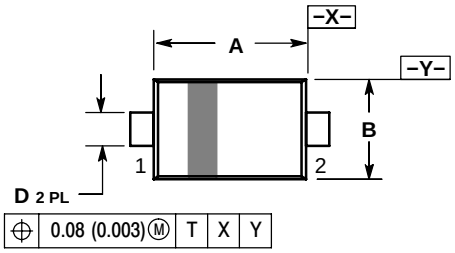
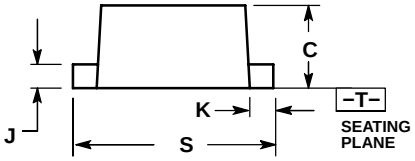


Figure 2. ESD Clamping Voltage Screenshot
Negative 8 kV Contact per IEC61000−4−2

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SOD-523 Package Outline & Dimensions

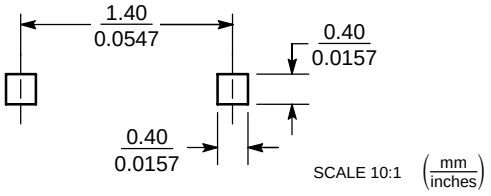




NOTES:
1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETER.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH THICKNESS. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.

	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
A	1.10	1.20	1.30	0.043	0.047	0.051
B	0.70	0.80	0.90	0.028	0.032	0.035
C	0.50	0.60	0.70	0.020	0.024	0.028
D	0.25	0.30	0.35	0.010	0.012	0.014
J	0.07	0.14	0.20	0.0028	0.0055	0.0079
K	0.15	0.20	0.25	0.006	0.008	0.010
S	1.50	1.60	1.70	0.059	0.063	0.067

SOLDERING FOOTPRINT*



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