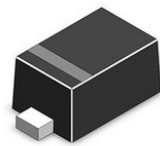


SOD-523 ESD Protection Diode Array SE12D5V11GW Low Clamping Voltage 25V

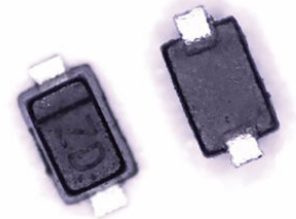
Basic Information

- Place of Origin: Shenzhen Guangdong China
- Brand Name: SOCAY
- Certification: REACH RoHS ISO
- Model Number: SE12D5V11GW
- Minimum Order Quantity: 3000PCS
- Price: Negotiable
- Delivery Time: 5-8 work days



Product Specification

- Product Name: ESD Arrays
- Product Package: SOD-523
- V_{rw} (Max.): 12V
- V_{br} (Min.): 14.1V
- I_r (Max.): 0.1μA
- I_t: 1mA
- V_c (Max.) (I_{pp}=5A): 25V
- C_j (Typ.): 55pF
- Highlight: ESD Protection Diode Array,
SOD-523 ESD Protection Diode,
ESD Protection Diode 25V



Product Description

SOCAY Original Factory ESD Protection Diode SE12D5V11GW Low Clamping Voltage 25V

ESD Protection Diode DATASHEET: [SE12D5V11GW_v2108.1.pdf](#)

ESD Protection Diode Features:

Protects one I/O line
Low clamping voltage
Working voltage: 12V
Low leakage current

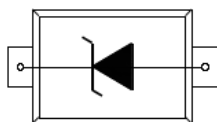
ESD Protection Diode Applications:

Cellular Handsets and Accessories
Portable Electronics
Servers, Notebook, and Desktop PC
Display Portst

ESD Protection Diode Mechanical Characteristics:

SOD-523 Package
Molding Compound Flammability Rating : UL 94V-0
Quantity Per Reel : 3,000pcs
Reel Size : 7 inch

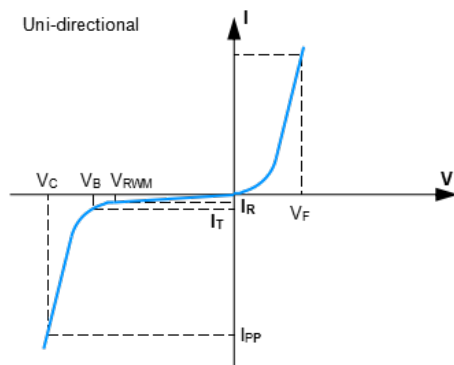
ESD Protection Diode Pin Configuration:



ESD Protection Diode Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise specified):

Symbol	Parameter	Value	Units
TL	Lead Soldering Temperature	260 (10sec)	$^\circ\text{C}$
TSTG	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
TOP	Operating Temperature Range	-55 to +150	$^\circ\text{C}$
	IEC61000-4-2 (ESD) Air Discharge	± 30	KV
	IEC61000-4-2 (ESD) Contact Discharge	± 30	
	IEC61000-4-4 (EFT)	40	A

I-V Curve Characteristics:



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}
I_T	Test Current

V_B	Breakdown Voltage @ I_T
I_F	Forward Current
V_F	Forward Voltage @ I_F
C	Max Capacitance @ $V_R=0V$ & $f=1MHz$

ESD Protection Diode Electrical Characteristics (TA = 25 unless otherwise specified):

Symbol	Conditions	Min	Typ	Max	Unit
V_{RWM}	---	---	---	12.0	V
V_{BR}	$I_T = 1\text{ mA}$	14.1	---	---	V
I_R	$V_R = 12V$	---	---	0.1	μA
V_C	$I_{PP} = 5.0A$, $t_p = 8/20\mu s$	---	---	25.0	V
C_J	$V_R = 0V$, $f = 1MHz$	---	55.0	---	pF

Electrical Characteristics Curves:

Fig1. 8/20 μs Pulse Waveform

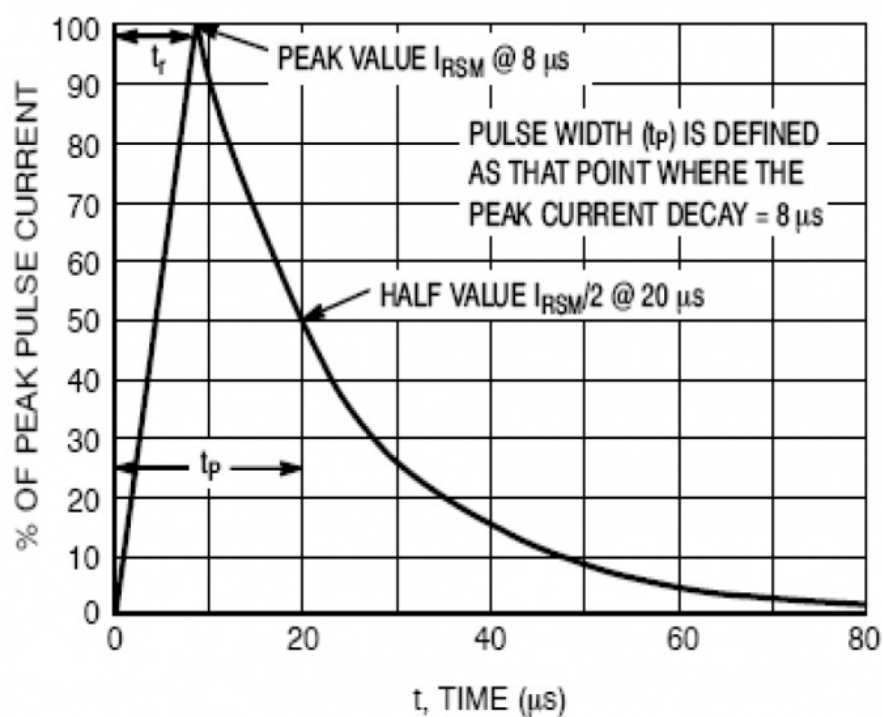


Fig2. Positive 8KV contact per IEC 61000-4-2

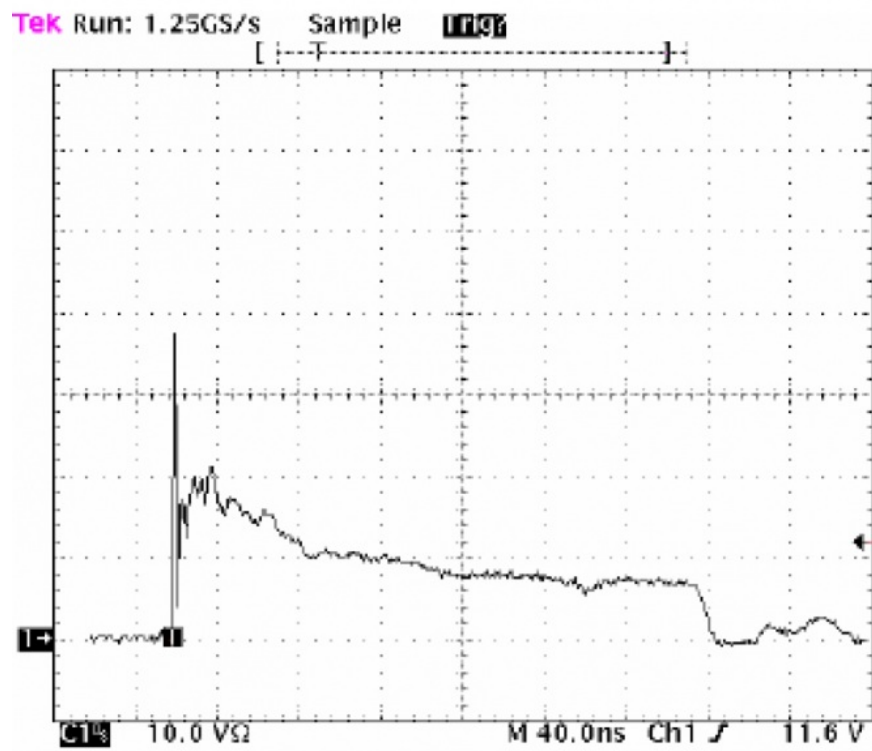
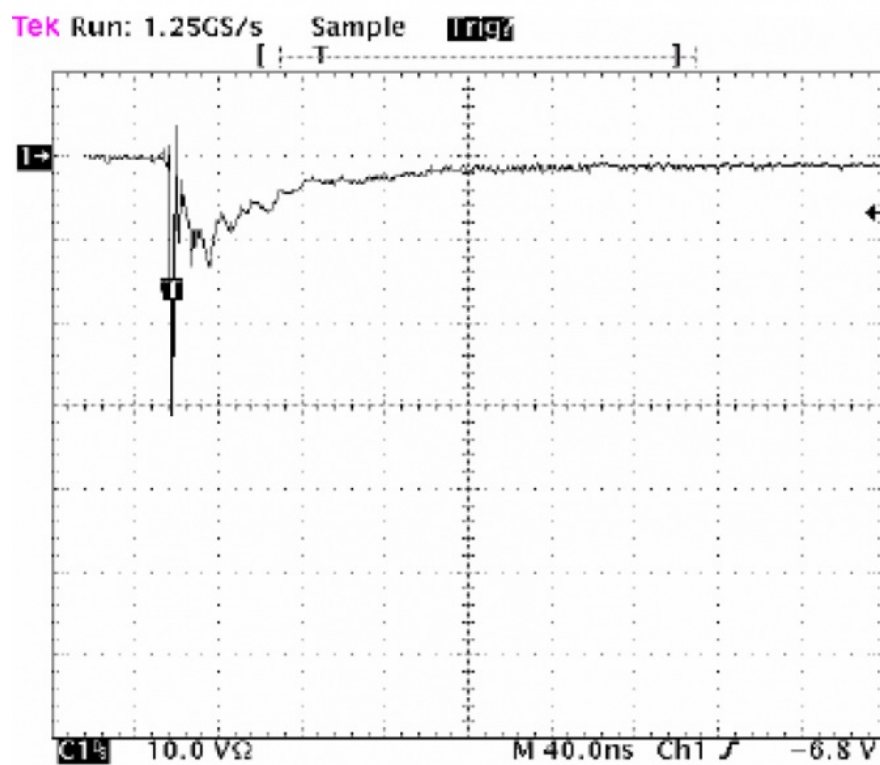
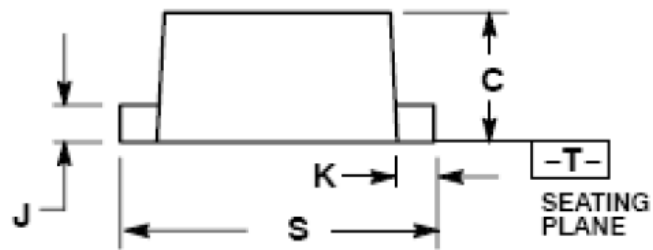
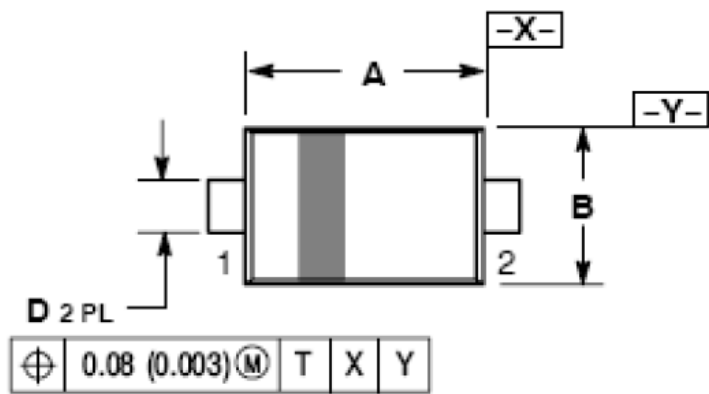


Fig3. Negative 8KV contact per IEC 61000-4-2



SOD-523 Package Outline & Dimensions:



Symbol	Millimeters			Inches		
	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

