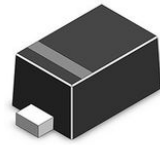


SOD-523 ESD Protection Diode Array SE12D5V11GW Low Clamping Voltage 25V

Our Product Introduction

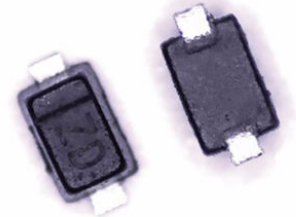
Basic Information

- 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_{rwm} (Max.): 12V
- V_{br} (Min.): 14.1V
- I_r (Max.): 0.1 μ A
- 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



for more products please visit us on socaydiode.com

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

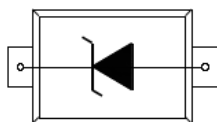
ESD Protection Diode Applications:

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

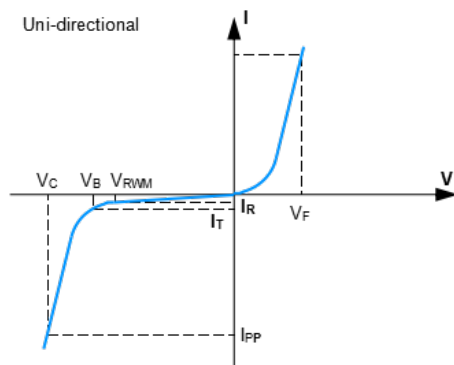
ESD Protection Diode Pin Configuration:



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

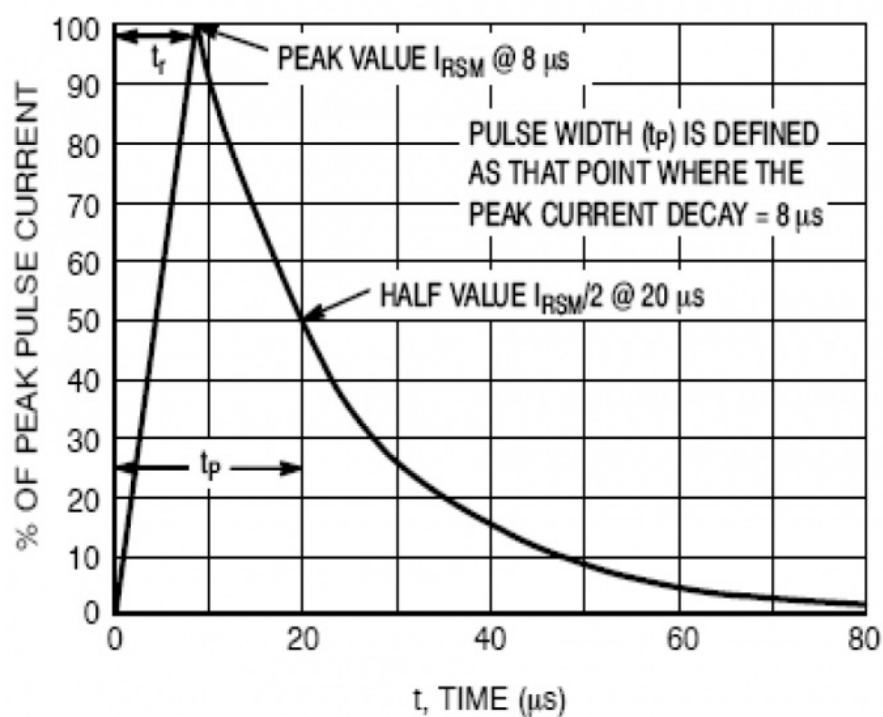


Fig2. Positive 8KV contact per IEC 61000-4-2

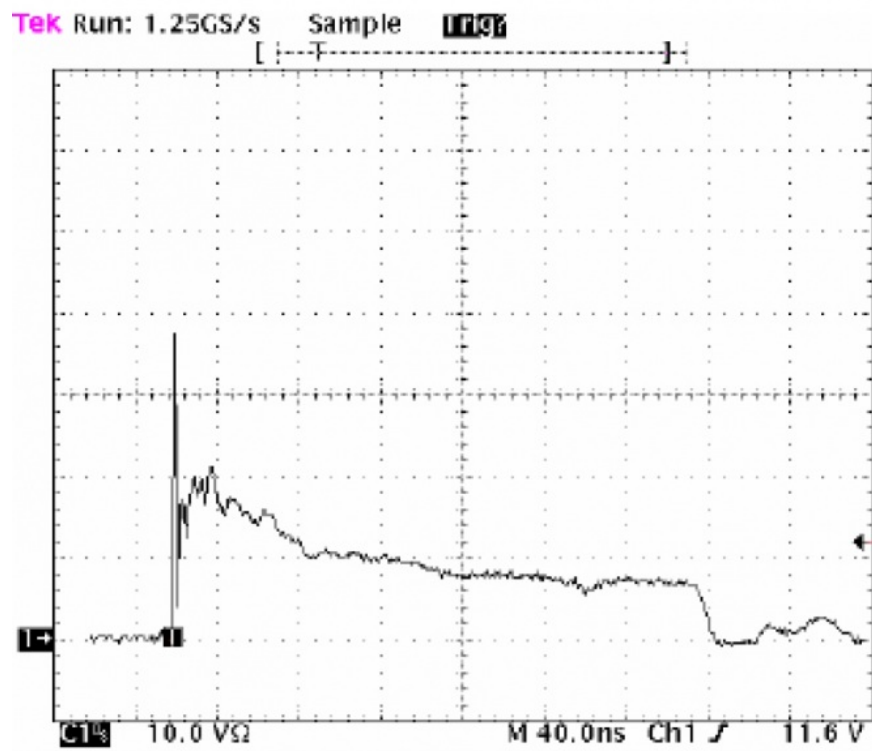
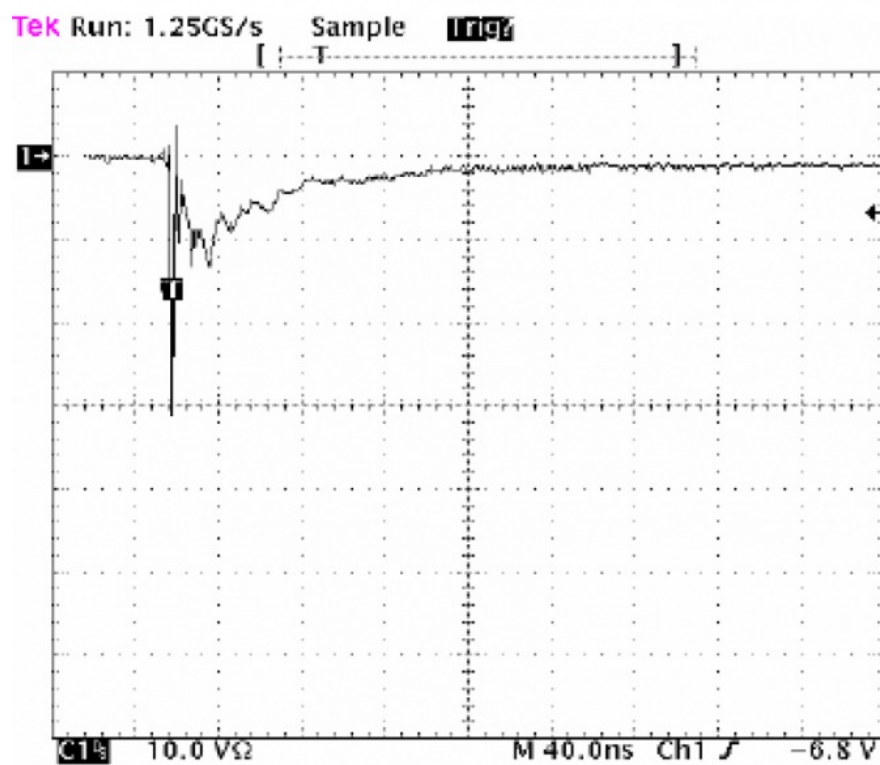
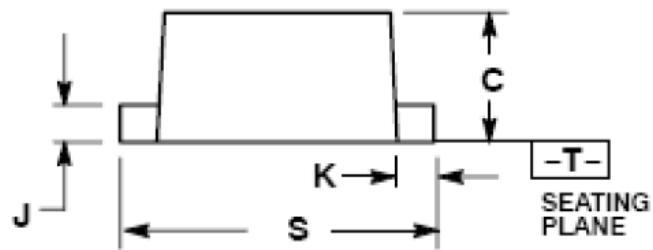
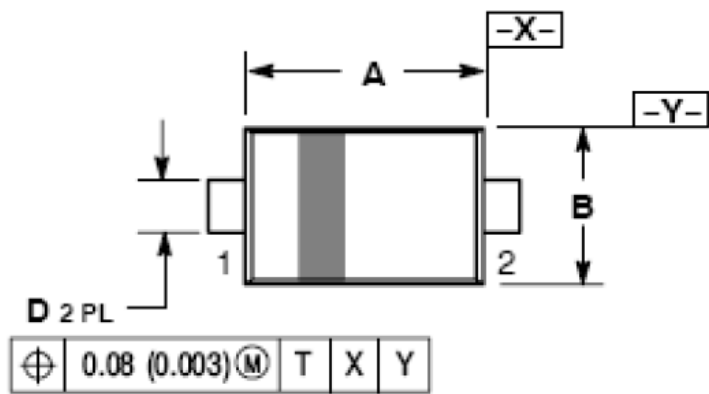


Fig3. Negative 8KV contact per IEC 61000-4-2



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

