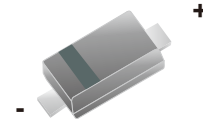


## CPDH36V0U-HF

RoHS Device  
Halogen Free

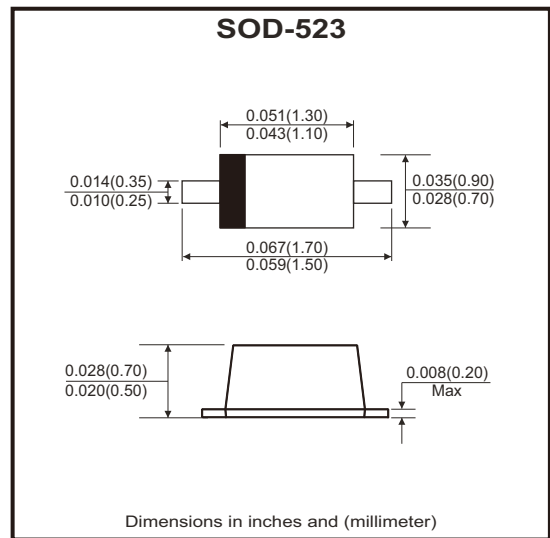


### Features

- IEC61000-4-2 Level 4 ESD protection.
- Protects one directional I/O line.
- Low clamping voltage.
- Working voltages: 36V.
- Low leakage current.

### Mechanical data

- Case: SOD-523 package.
- Flammability rating: UL 94V-0.
- High temperature soldering guaranteed: 260°C/10s.



### Circuit Diagram



### Maximum Rating (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (air)	V <sub>ESD</sub>	±25	kV
ESD per IEC 61000-4-2 (contact)		±20	
Total power dissipation on FR-5 board (Note 1) @ Ta=25°C	P <sub>D</sub>	150	mW
Operating temperature range	T <sub>OPT</sub>	-55 to +125	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

Notes: 1. FR-5 = 1.0 x 0.75 x 0.62 in.

## Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse working voltage		$V_{RWM}$			36	V
Reverse breakdown voltage	$I_T = 1\text{mA}$	$V_{BR}$	40			V
Reverse leakage current	$V_{RWM} = 36\text{V}$	$I_R$			5	$\mu\text{A}$
Clamping voltage	$I_{PP} = 1\text{A}$ , $T_P = 8/20\mu\text{s}$	$V_C$			55	V
Junction capacitance	$V_R = 0\text{V}$ , $f = 1\text{MHz}$	$C_J$			28	pF

## Rating and Characteristic Curves (CPDH36V0U-HF)

Fig.1 - ESD Clamping Voltage Screenshot  
Positive 8 kV Contact per IEC 61000-4-2

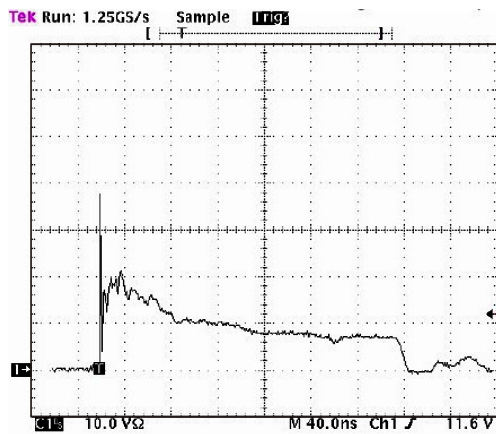
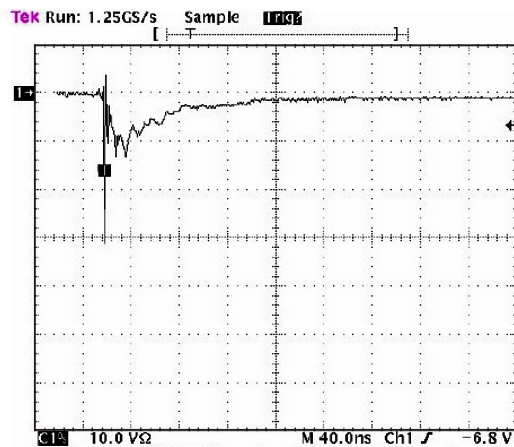
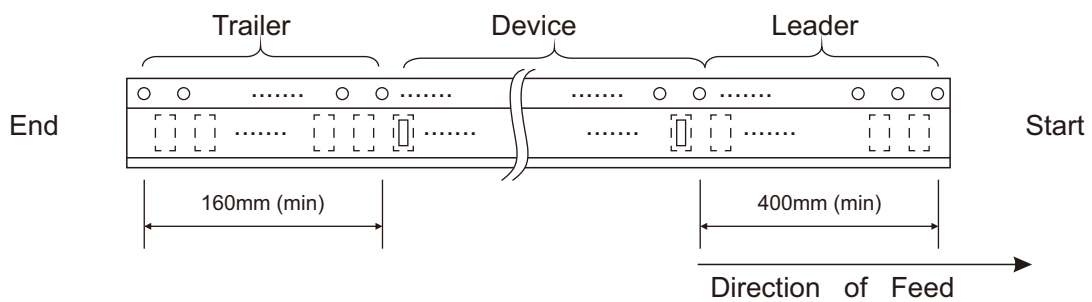
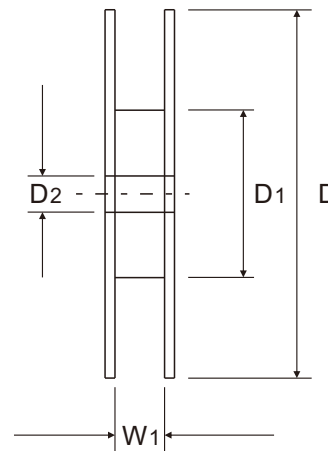
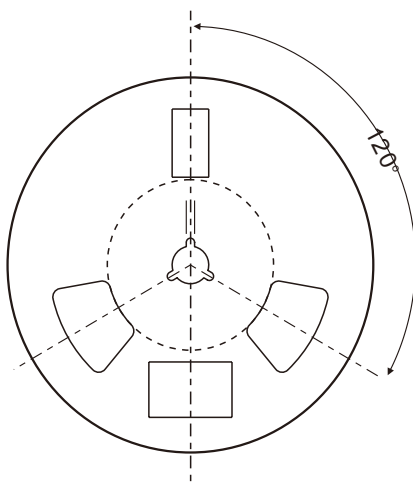
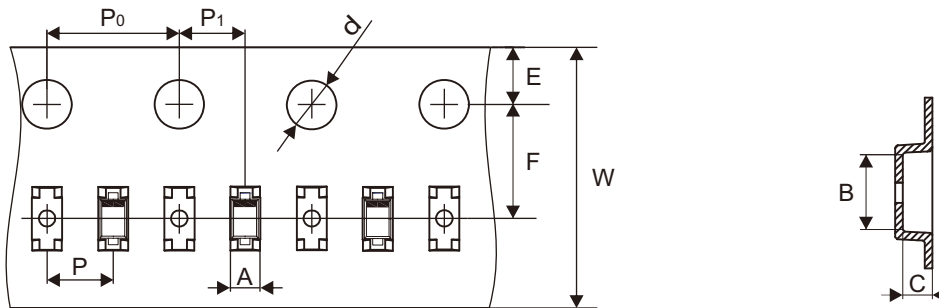


Fig.2 - ESD Clamping Voltage Screenshot  
Negative 8 kV Contact per IEC 61000-4-2



## Reel Taping Specification



SOD-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.90 ± 0.05	1.95 ± 0.05	0.73 ± 0.05	1.55 ± 0.05	178.00 ± 2.00	54.50 ± 1.00	13.00 ± 1.00
	(inch)	0.035 ± 0.002	0.077 ± 0.002	0.029 ± 0.002	0.061 ± 0.002	7.008 ± 0.079	2.146 ± 0.039	0.512 ± 0.039

SOD-523	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 - 0.10	9.40 ± 1.50
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.315 + 0.012 - 0.004	0.370 ± 0.059

Company reserves the right to improve product design, functions and reliability without notice. REV:A