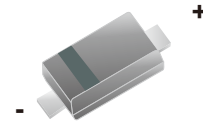


CPDH36V0U-HF

RoHS Device
Halogen Free

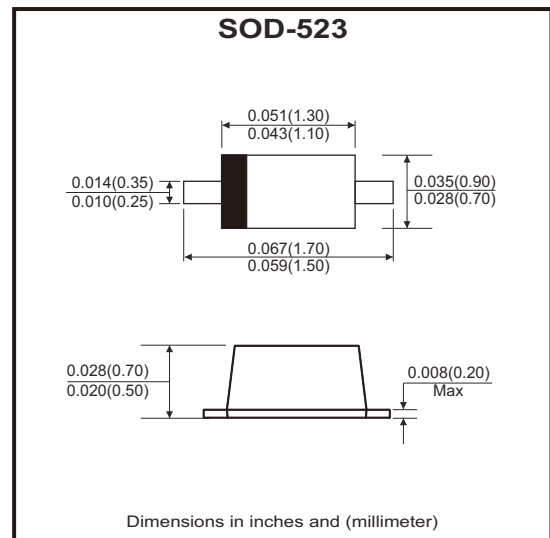


Features

- IEC 61000-4-2 (ESD) $\pm 25\text{kV}$ (air), $\pm 20\text{kV}$ (contact).
- 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: $260^{\circ}\text{C}/10\text{s}$.



Circuit Diagram



Maximum Rating (at $T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power (8/20 μs)	P_{PP}	55	W
Peak pulse current (8/20 μs)	I_{PP}	1	A
ESD per IEC 61000-4-2 (air) ESD per IEC 61000-4-2 (contact)	ESD	± 25 ± 20	kV
Total power dissipation on FR-5 board (Note 1) @ $T_a=25^{\circ}\text{C}$	P_D	150	mW
Operating temperature range	T_{OPT}	-55 to +125	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

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	μA
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		15	28	pF

Typical Rating and Characteristic Curves (CPDH36V0U-HF)

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

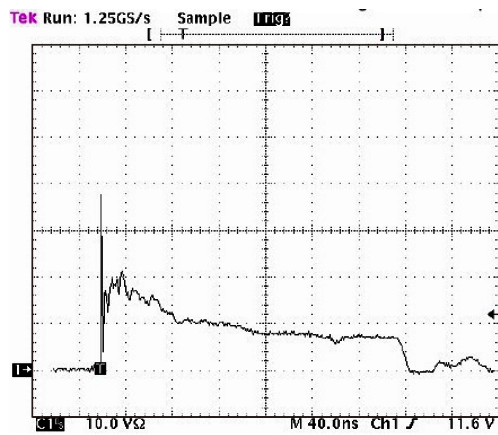
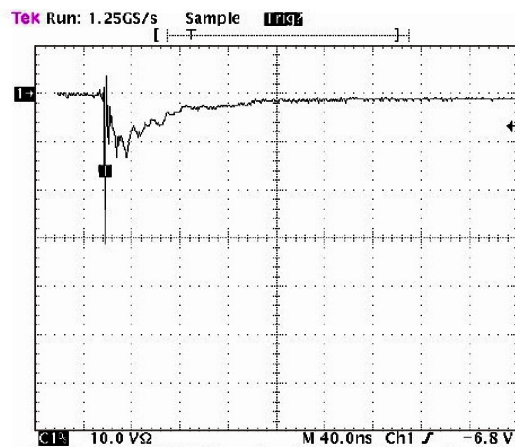
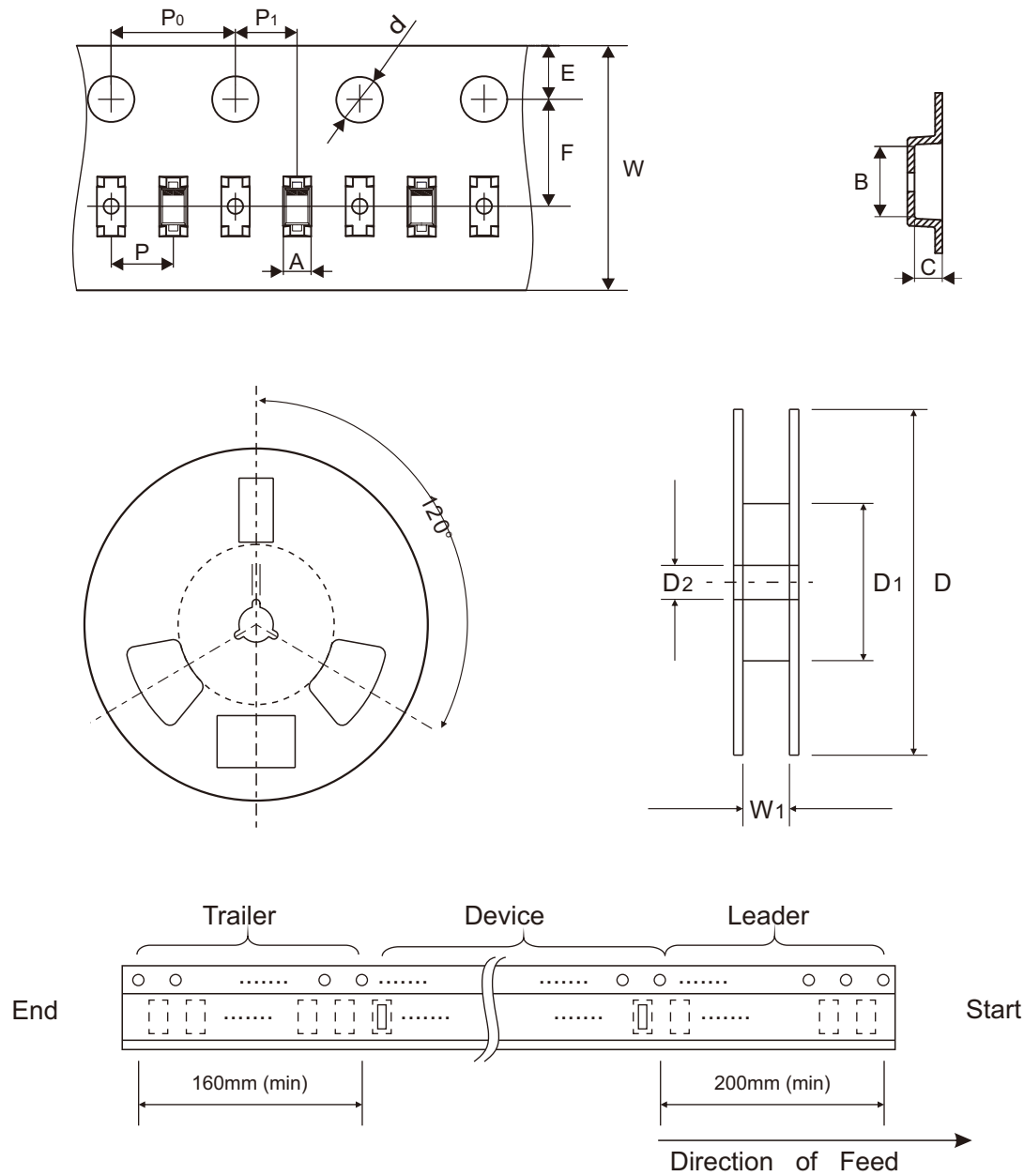


Fig.2 - ESD Clamping Voltage Screenshot
Negative 8 kV Contact per IEC 61000-4-2



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

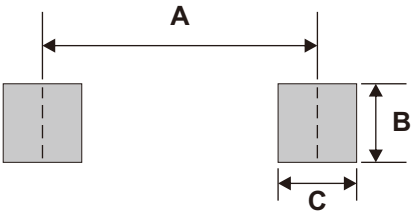
Marking Code

Part Number	Marking Code
CPDH36V0U-HF	ZS



Suggested P.C.B. PAD Layout

SIZE	SOD-523	
	(mm)	(inch)
A	1.40	0.055
B	0.40	0.016
C	0.40	0.016



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOD-523	3,000	7