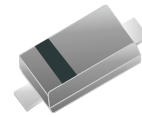


CPDH36V0U-A2HF

RoHS Device
Halogen free

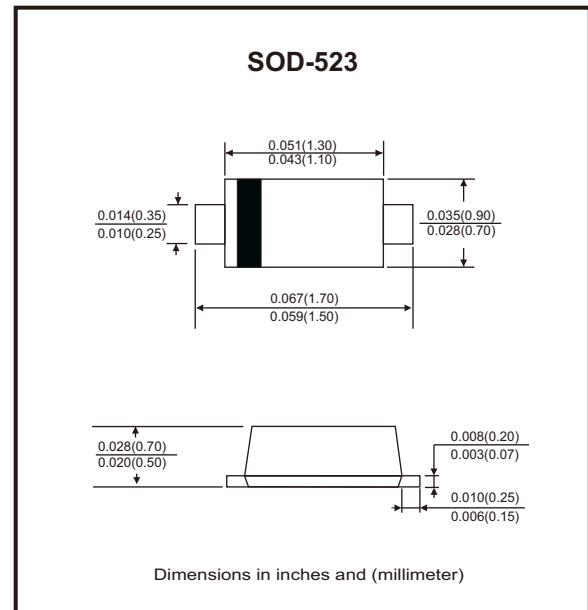


Features

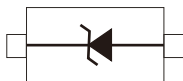
- Low clamping voltage.
- Low Leakage current.
- 150W peak pulse power per line (tp=8/20μs).
- Protects one I/O line.
- Working voltages: 36V

Mechanical data

- Case: SOD-523 , plastic package.
- Molding Compound Flammability Rating: UL 94V-0.
- Polarity: Indicated by cathode band.
- Mounting position: Any.



Circuit Diagram



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

Parameter	Symbol	Value	Unit
Peak pulse power (tp = 8/20μs waveform)	PPp	150	W
Peak pulse current (tp = 8/20μs waveform)	IPP	2	A
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	ESD	±30	kV
Lead soldering temperature	TL	260 (10 sec)	°C
Operating temperature range	TJ	-55 to +150	°C
Storage temperature range	TSTG	-55 to +150	°C

Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Working peak reverse voltage		V_{RWM}			36	V
Forward voltage	$I_F = 10\text{mA}$	V_F		0.8	1.2	V
Breakdown voltage	$I_T = 1\text{mA}$	V_{BR}	40			V
Reverse leakage current	$V_{RWM} = 36\text{V}$	I_R			1	μA
Clamping voltage	$I_{PP} = 1\text{A}$, $T_P = 8/20\mu\text{s}$	V_C			55	V
	$I_{PP} = 2\text{A}$, $T_P = 8/20\mu\text{s}$				75	
Junction capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_J		25		pF

Typical Rating and Characteristic Curves (CPDH36V0U-A2HF)

Fig.1 - Pulse Waveform

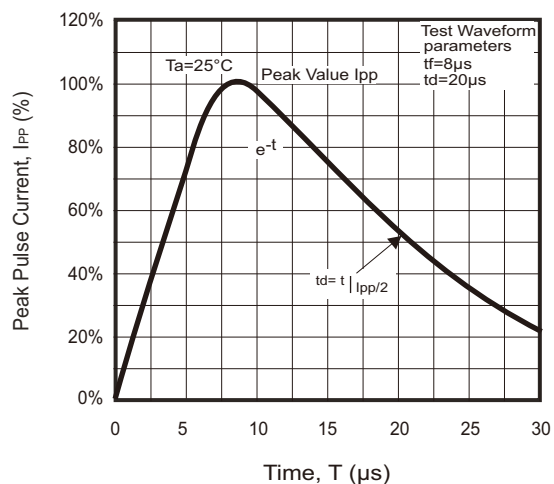
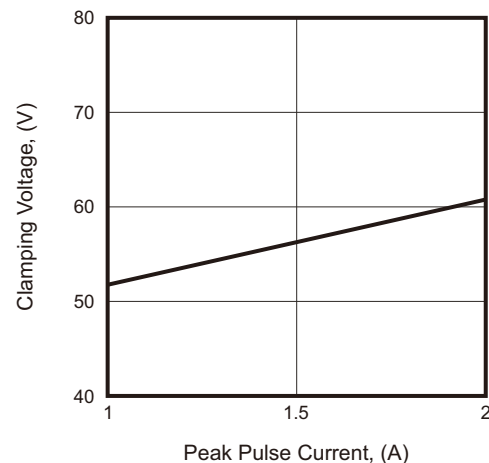
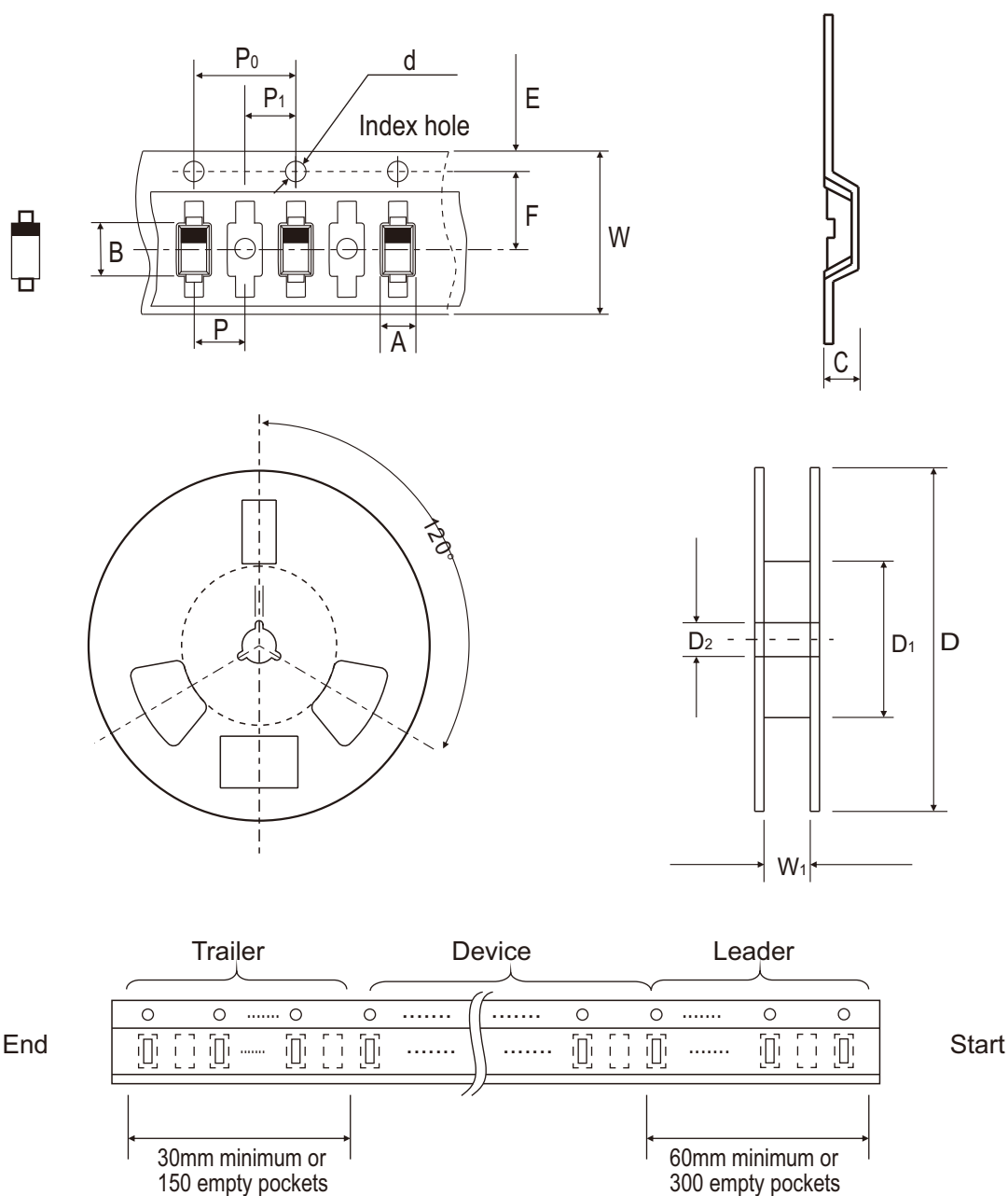


Fig.2 - Typical Clamping Voltage vs. Peak Pulse Current



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	1.50 ± 0.10	178.00 ± 1.00	54.40 ± 0.40	13.00 ± 0.20
	(inch)	0.035 ± 0.002	0.077 ± 0.002	0.029 ± 0.002	0.059 ± 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

SOD-523	SYMBOL	E	F	P	P_0	P_1	W	W_1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	$8.00 \pm 0.30 / - 0.10$	9.40 ± 1.50
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.158 ± 0.004	0.079 ± 0.002	$0.315 \pm 0.012 / - 0.004$	0.370 ± 0.059

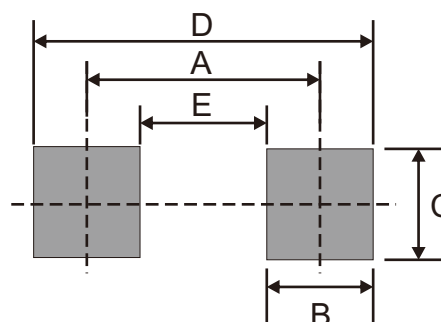
Marking Code

Part Number	Marking Code
CPDH36V0U-A2HF	KT



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
D	1.80	0.071
E	1.00	0.039



Standard Packaging

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