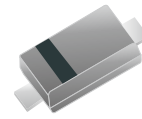


CPDH5V0UA-HF Thru. CPDH36V0UA-HF

RoHS Device

Halogen free



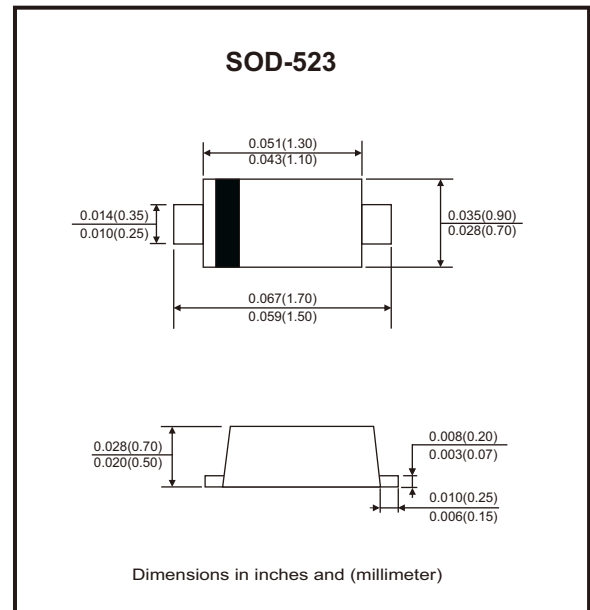
Features

- Low clamping voltage.
- Low Leakage current.
- Protects one I/O line.
- Working voltages: 5.0V ~ 36V.

Mechanical data

- Case: SOD-523, plastic package.
- Molding Compound Flammability Rating: UL 94V-0.
- Polarity: Color band denotes cathode end.
- 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)	CPDH5V0UA-HF	PPp	208	W
	CPDH8V0UA-HF		200	
	CPDH12V0UA-HF		168	
	CPDH15V0UA-HF		175	
	CPDH18V0UA-HF		167	
	CPDH24V0UA-HF		144	
	CPDH36V0UA-HF		150	
Peak pulse current (tp = 8/20μs waveform)		IPP	See next table	A
ESD per IEC 61000-4-2(Air)	CPDH5V0UA-HF,CPDH8V0UA-HF CPDH12V0UA-HF,CPDH15V0UA-HF	ESD	±30	kV
ESD per IEC 61000-4-2(Contact)			±30	
ESD per IEC 61000-4-2(Air)	CPDH18V0UA-HF CPDH24V0UA-HF CPDH36V0UA-HF	ESD	±25	kV
ESD per IEC 61000-4-2(Contact)			±15	
Lead soldering temperature		TL	260 (10 sec)	°C
Operating temperature range		TJ	-40 to +125	°C
Storage temperature range		Tstg	-55 to +150	°C

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

Part No	Marking	V _{RWM} (V) (Max.)	V _{BR} (V) (Min.)	I _T (mA)	V _{C @ 1A} (V) (Max.)	V _{C@I_{PP}} (V) (Max.) (@A)		I _R (μA) (Max.)	C _J (pF) (Typ.)
CPDH5V0UA-HF	KE	5	6	1	9	16	13	5	110
CPDH8V0UA-HF	ZE	8	8.5	1	13	20	10	5	70
CPDH12V0UA-HF	ZM	12	13.3	1	16.5	28	6	1	60
CPDH15V0UA-HF	KP	15	16.6	1	21	35	5	1	50
CPDH18V0UA-HF	KK	18	19	1	26	37	4.5	1	30
CPDH24V0UA-HF	KR	24	26.7	1	34.7	48	3	1	25
CPDH36V0UA-HF	KT	36	40	1	62	75	2	1	25

Typical Rating and Characteristic Curves (CPDH5V0UA-HF Thru. CDPH36V0UA-HF)

Fig.1 - Pulse Waveform

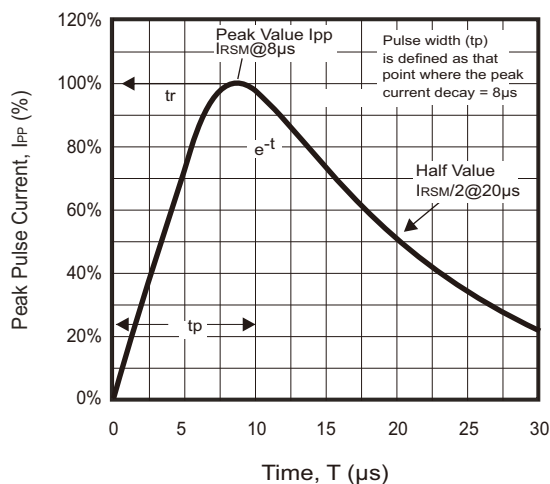
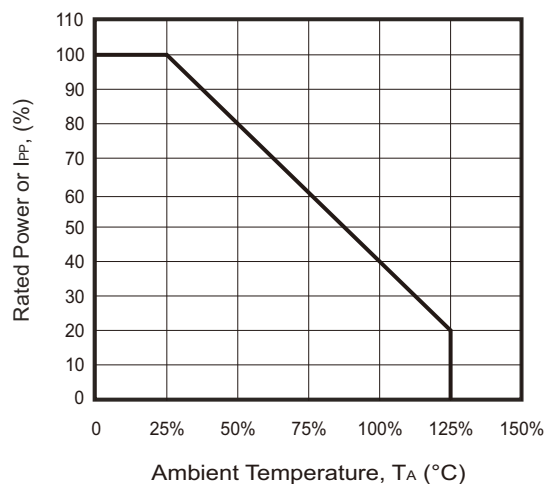
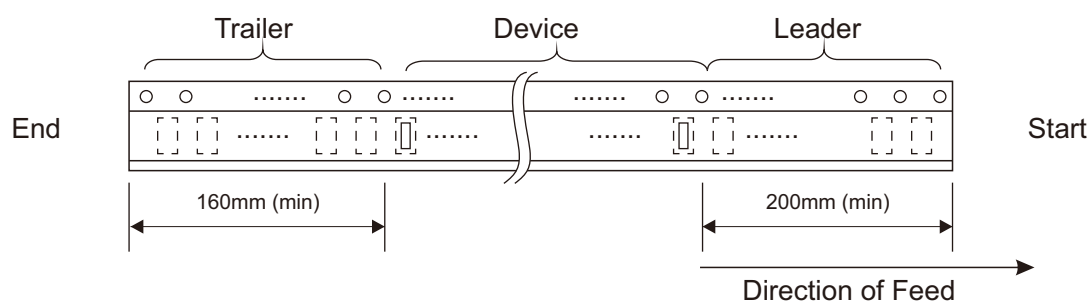
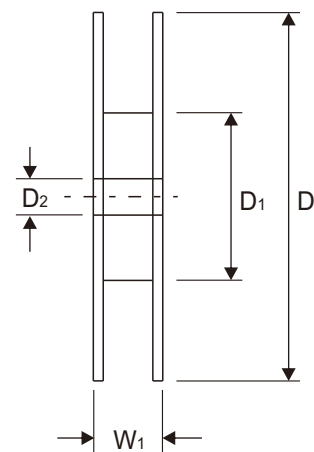
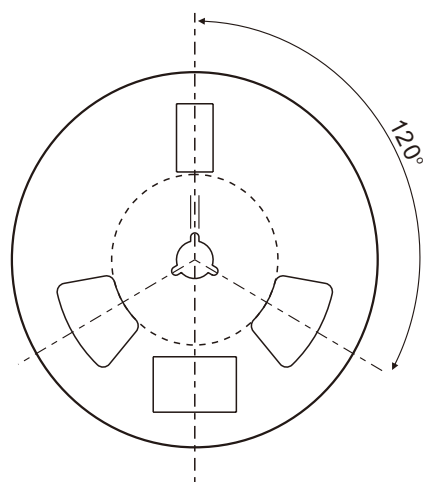
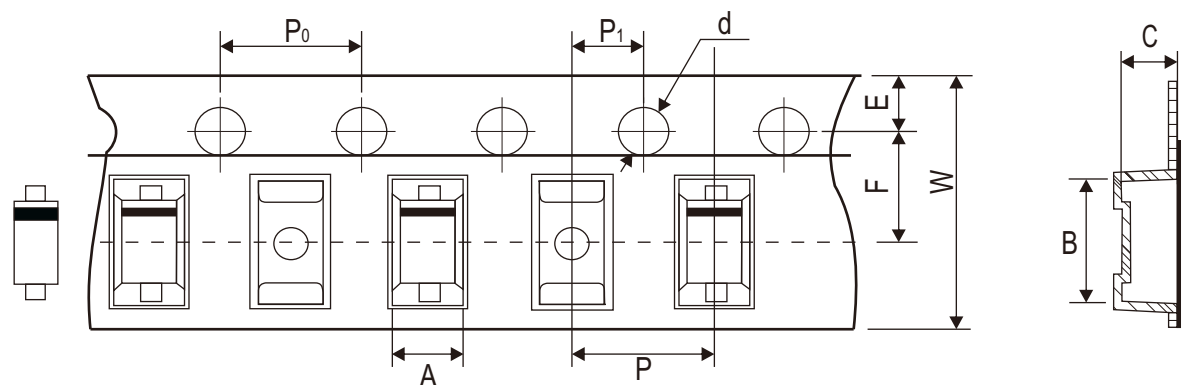


Fig.2 - Power Derating Curve



Reel Taping Specification



SOD-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.96 ± 0.05	1.94 ± 0.05	0.73 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.038 ± 0.002	0.076 ± 0.002	0.029 ± 0.002	0.059 ± 0.004	7.008 ± 0.078	2.142 ± 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 ± 0.05	2.00 ± 0.05	8.00 + 0.30 / -0.10	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.002	0.079 ± 0.002	0.315 + 0.012 / -0.004	0.484 ± 0.039

Marking Code

Part Number	Marking Code
CPDH5V0UA-HF	KE
CPDH8V0UA-HF	ZE
CPDH12V0UA-HF	ZM
CPDH15V0UA-HF	KP
CPDH18V0UA-HF	KK
CPDH24V0UA-HF	KR
CPDH36V0UA-HF	KT

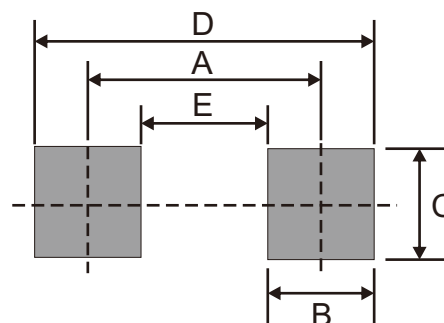


■ = Cathode band

xx = Product type marking code

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