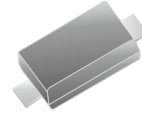


CPDH5V0HE-HF

RoHS Device
Halogen Free



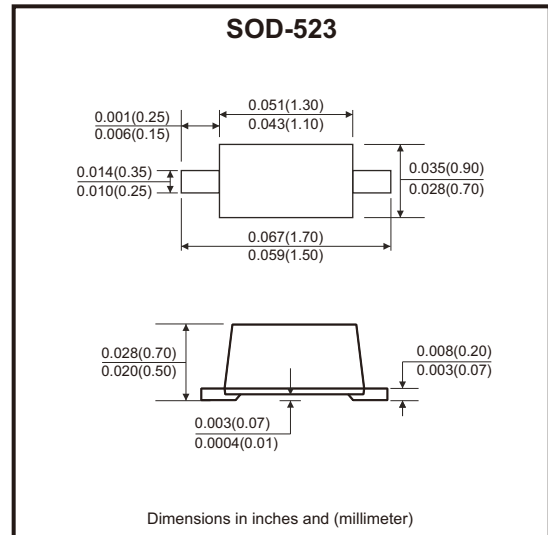
Features

- Low capacitance.
- Reverse standoff voltage: 5V
- IEC 61000-4-2 (air): $\pm 30\text{kV}$
IEC 61000-4-2 (contact): $\pm 30\text{kV}$
IEC 61000-4-5 (surge): 7A(8/20 μs)

Mechanical data

- Case: SOD-523 standard package, molded plastic.
- Mounting position: Any.

Circuit Diagram



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

Parameter	Conditions	Symbol	Value	Unit
Electrostatic discharge voltage	IEC 61000-4-2(contact) IEC 61000-4-2(air)	V_{ESD}	± 30	kV
Peak pulse power	$T_P = 8/20\mu\text{s}$	P_{PP}	65	W
Peak pulse current	$T_P = 8/20\mu\text{s}$	I_{PP}	7	A
Operating junction temperature range		T_J	-55 to +125	$^\circ\text{C}$
Storage temperature range		T_{STG}	-55 to +150	$^\circ\text{C}$

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse working voltage		V_{RWM}		5		V
Breakdown voltage	$I_{\text{BR}} = 1\text{mA}$	V_{BR}	5.8	7.2	8.0	V
Clamping voltage ($T_P = 8/20\mu\text{s}$)	$I_{\text{PP}} = 1\text{A}$	V_C		8.5	10	V
	$I_{\text{PP}} = 7\text{A}$	V_C		12	14.5	
Reverse leakage current	$V_{\text{RWM}} = 5\text{V}$	I_{Leak}			100	nA
Dynamic resistance	$T_P = 100\text{ns}$	R_{DYN}		0.19		Ω
Junction capacitance	$V_{\text{RWM}} = 0\text{V}$, $f = 1\text{MHz}$	C_J		12	15	pF

Typical Rating and Characteristic Curves (CPDH5V0HE-HF)

Fig.1 - Clamping Voltage (TLP)

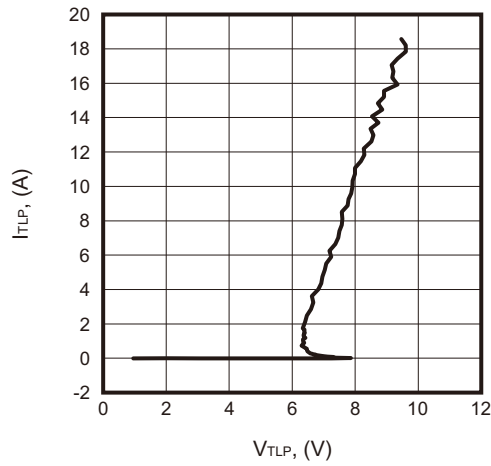


Fig.2 - Junction Capacitance

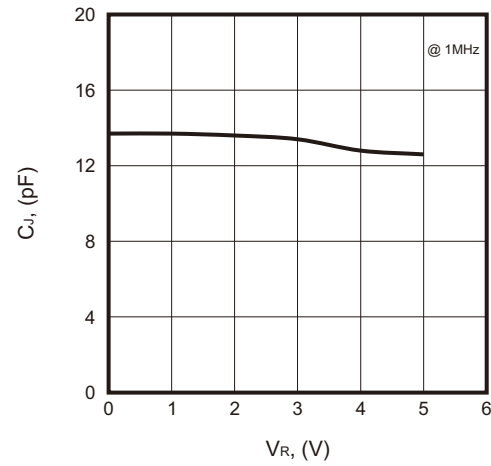
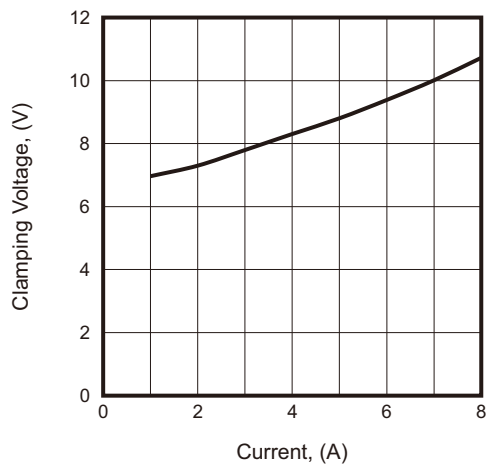
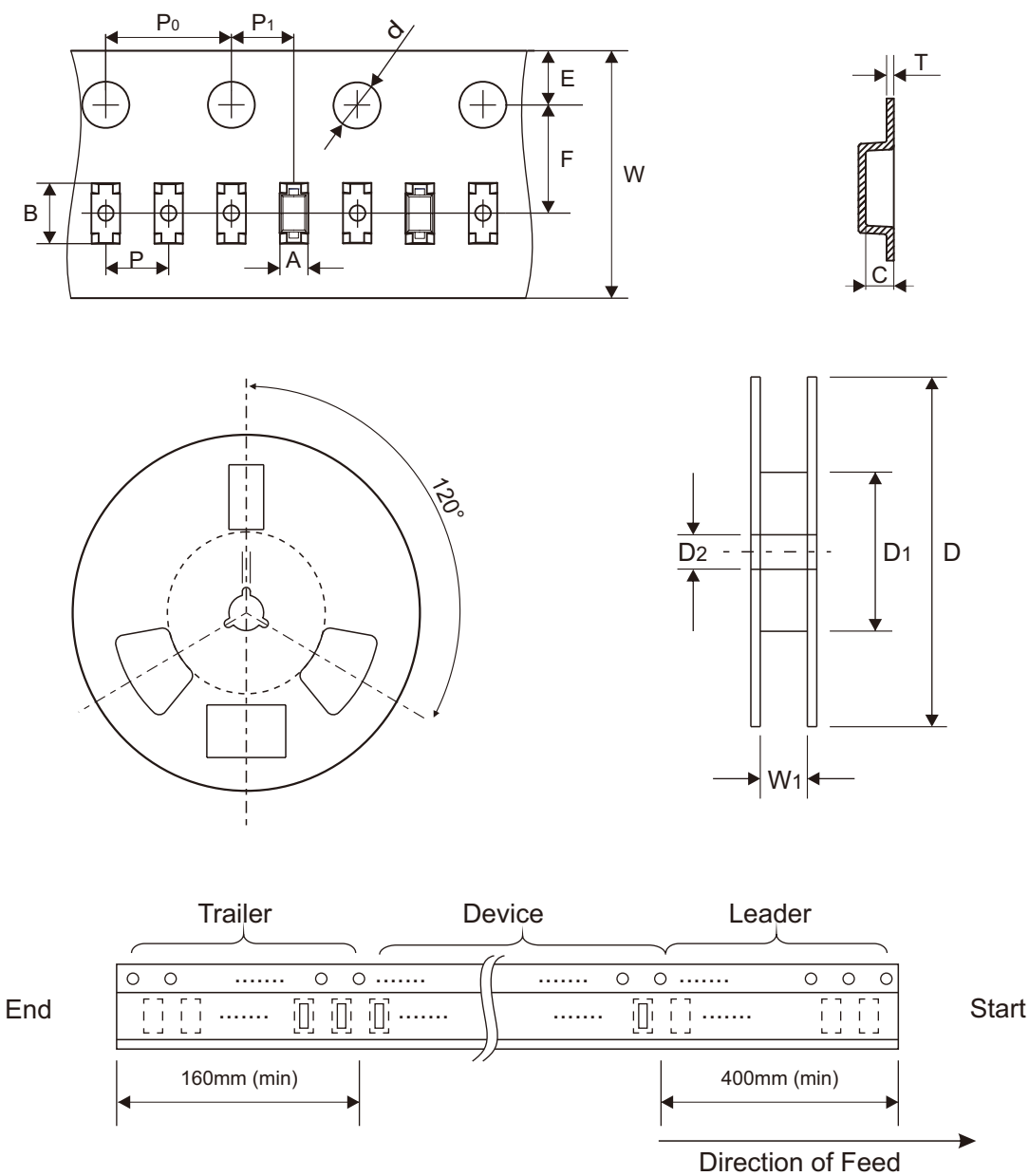


Fig.3 - Peak Pulse Current vs Clamping Voltage (8/20 μ s)



Reel Taping Specification



SOD-523	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.90 ± 0.03	1.88 ± 0.05	0.73 ± 0.05	1.50 + 0.10	178.00 ± 2.00	50.00 ± 0.50	13.00 ± 0.25
	(inch)	0.035 ± 0.001	0.074 ± 0.002	0.029 ± 0.002	0.059 + 0.004	7.008 ± 0.079	1.969 ± 0.020	0.512 ± 0.010

SOD-523	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	2.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.03	8.00 + 0.30 - 0.10	9.50 ± 1.50
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.079 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.015	0.315 + 0.012 - 0.004	0.374 ± 0.059

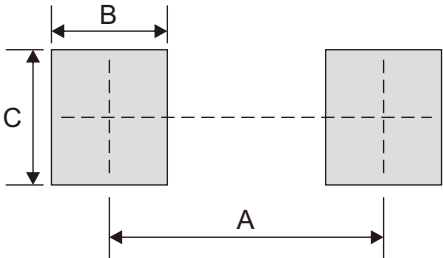
Marking Code

Part Number	Marking Code
CPDH5V0HE-HF	PB



Suggested P.C.B. PAD Layout

SIZE	SOD-523	
	(mm)	(inch)
A	1.42	0.056
B	0.60	0.024
C	0.70	0.028



Standard Packaging

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