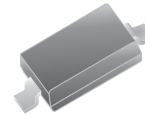


## CPDH-5V0C-HF

### RoHS Device

### Halogen Free

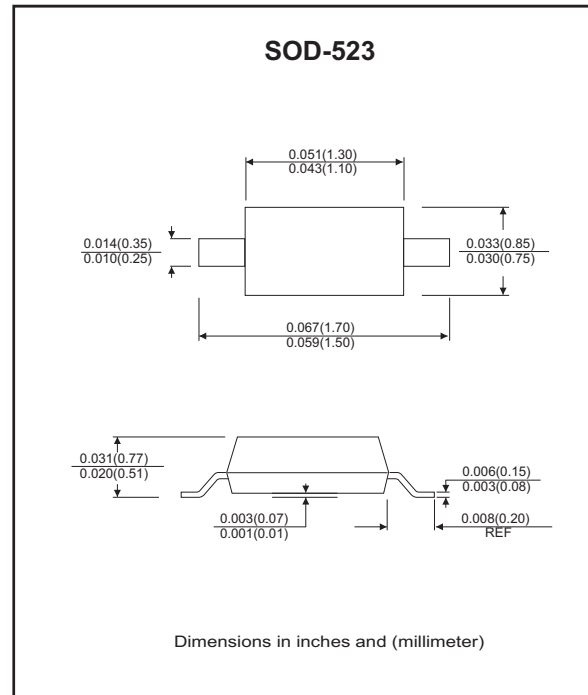


### Features

- Bi-directional ESD protection.
- IEC61000-4-2 8kV(Contact), 16kV(air).
- Operating voltage: 5V.

### Mechanical data

- Case: SOD-523 Standard package, molded plastic.
- Terminals: solderable per MIL-STD-750D, method 2026.
- Marking code: E05
- Mounting position: Any.
- Weight: 0.0012 gram(approx.).



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Diode breakdown voltage	I <sub>R</sub> = 1mA	V <sub>BD</sub>	6.1	7.0		V
Leakage current	V <sub>R</sub> = 5V	I <sub>L</sub>		0.1	2.0	uA
Junction capacitance	V <sub>R</sub> = 0V, f = 1MHz	C <sub>T</sub>		25	30	pF
ESD capability	IEC 61000-4-2(air) IEC 61000-4-2(contact)	ESD			16 8	kV
Operation temperature		T <sub>j</sub>			125	°C
Storage temperature		T <sub>STG</sub>	-55		150	°C

## RATING AND CHARACTERISTIC CURVES (CPDH-5V0C-HF)

Fig. 1 - Reverse characteristics

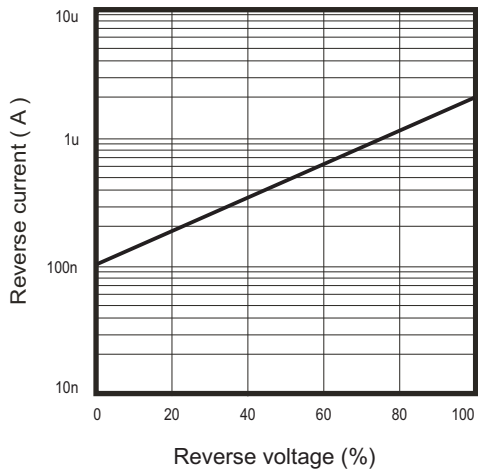


Fig. 2 - Capacitance between terminals characteristics

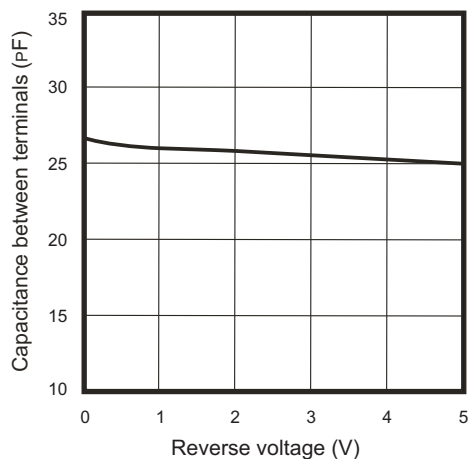
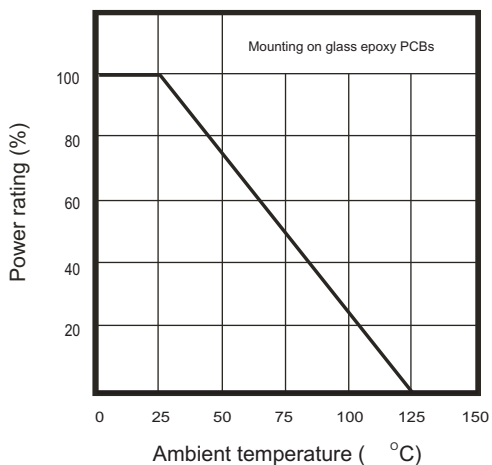
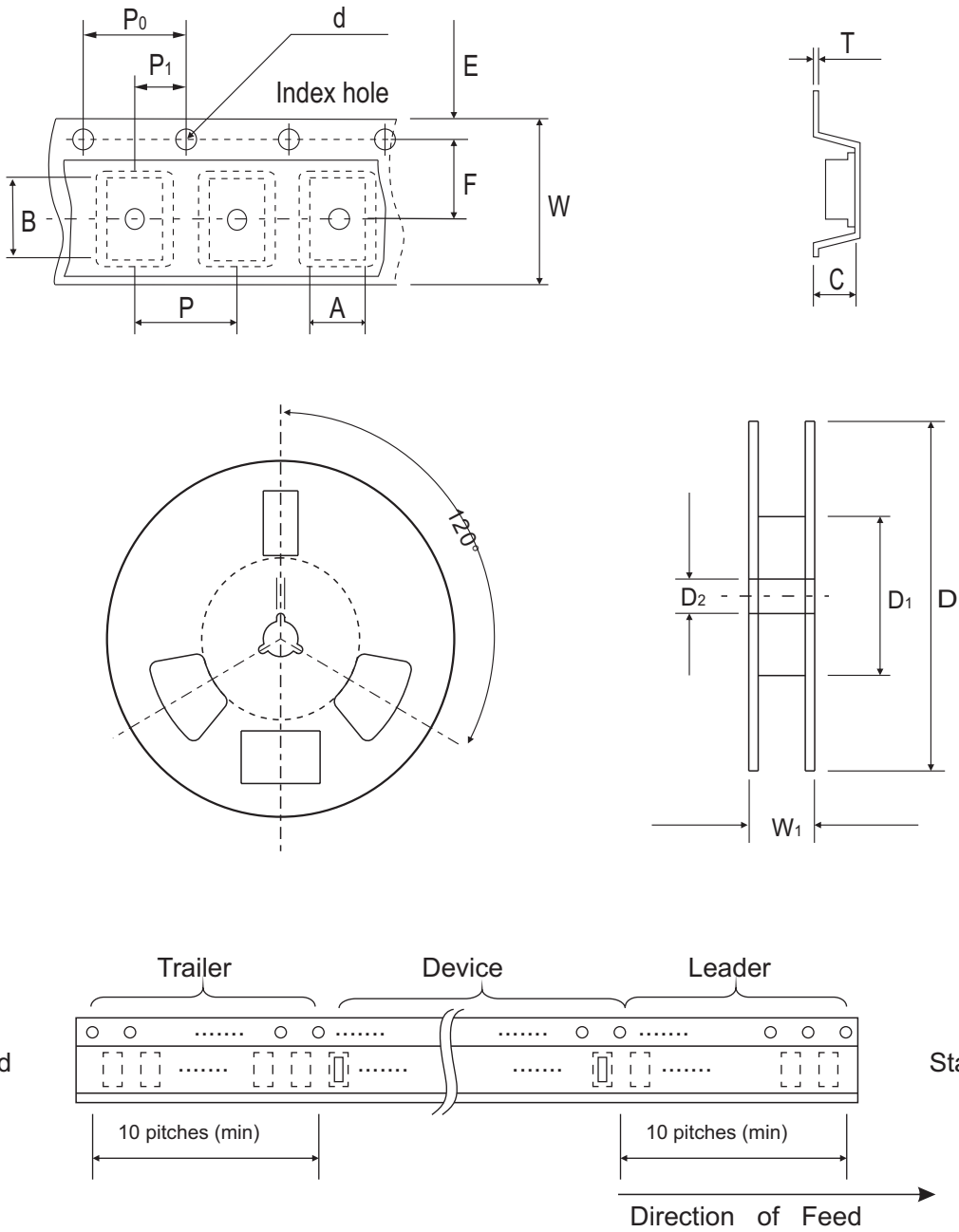


Fig. 3 - Power rating derating curve



## Reel Taping Specification



SOD-523	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	0.96 ± 0.05	1.94 ± 0.05	0.73 ± 0.05	1.50 ± 0.10	178 ± 1	54.4 ± 0.4	1.30 ± 0.05
	(inch)	0.038 ± 0.002	0.076 ± 0.002	0.029 ± 0.002	0.059 ± 0.004	7.008 ± 0.04	2.142 ± 0.016	0.512 ± 0.002

SOD-523	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	0.18 ± 0.02	8.00 ± 0.40	12.3 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.007 ± 0.001	0.315 ± 0.016	0.484 ± 0.008

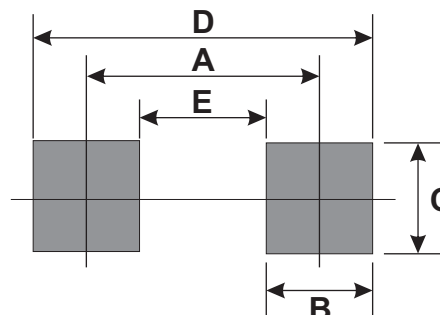
## Marking Code

Part Number	Marking Code
CPDH-5V0C-HF	E05



## Suggested PAD Layout

SIZE	SOD-523	
	(mm)	(inch)
A	1.40	0.055
B	0.60	0.024
C	0.70	0.028
D	2.00	0.079
E	0.80	0.031



## Standard Packaging

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