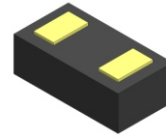


## CPDWL5V0-HF

Ultra small SMD package

RoHS Device  
Halogen Free



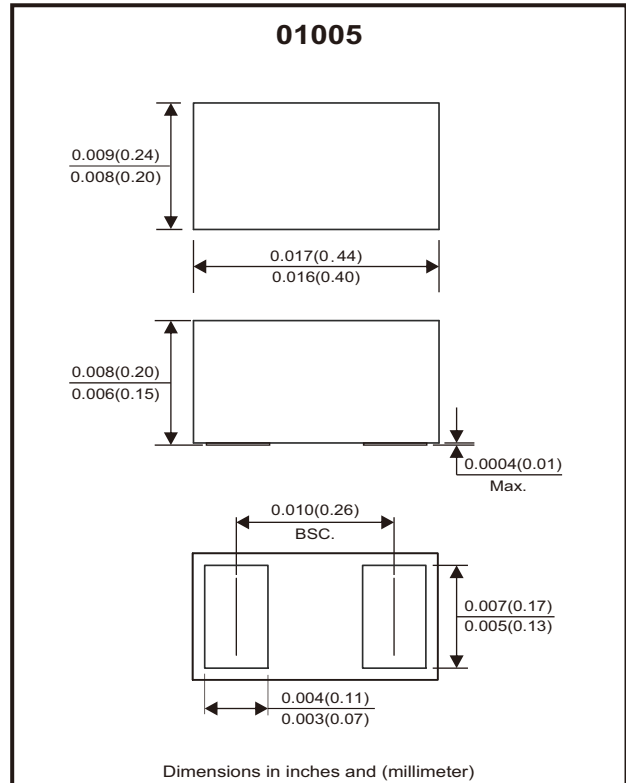
### Features

- Bi-directional ESD protection.
- High ESD protection level.
- Surface mount package.
- High component density.
- Low clamping voltage.
- Low leakage.
- Working voltage: 5V.

### Mechanical data

- Case: 01005 package, molded plastic.
- Mounting position: Any

### Circuit Diagram



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

Parameter	Conditions	Symbol	Value	Unit
Peak pulse power	$T_P = 8/20\mu s$	$P_{PP}$	60	W
Peak pulse current	$T_P = 8/20\mu s$	$I_{PP}$	5	A
ESD capability	IEC 61000-4-2(air) ICE 61000-4-2(contact)	ESD	$\pm 18$	kV
Operating temperature range		$T_j$	-40 ~ +125	°C
Storage temperature range		$T_{STG}$	-55 ~ +150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Working peak reverse voltage		$V_{RWM}$			5	V
Breakdown voltage	$I_R = 1mA$	$V_{BR}$	6			V
Reverse leakage current	$V_R = 5V$	$I_R$			0.1	$\mu A$
Clamping voltage	$I_{PP} = 1A, T_P = 8/20\mu s$	$V_C$		8.5	10	V
	$I_{PP} = 5A, T_P = 8/20\mu s$			10.5	12	
Junction capacitance	$V_R = 0V, f = 1MHz$	$C_J$			30	pF

## Rating and Characteristic Curves (CPDWL5V0-HF)

Fig.1 - 8/20 $\mu$ s Peak Pulse Current Waveform Acc. IEC 61000-4-5

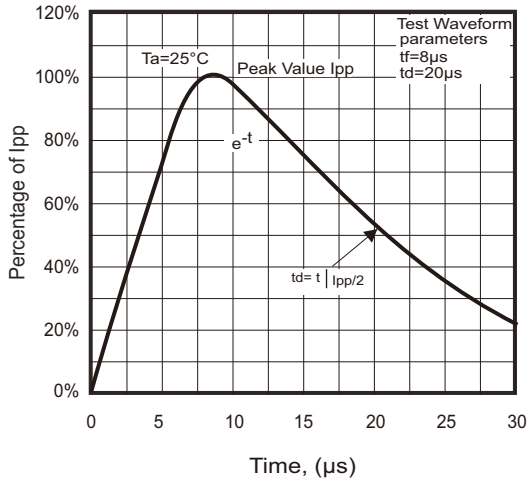


Fig.2 - Power Rating Derating Curve

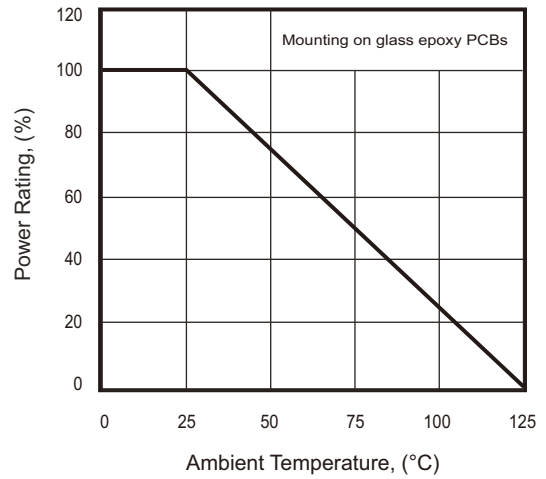


Fig.3 - Typical Capacitance Between Terminals Characteristics

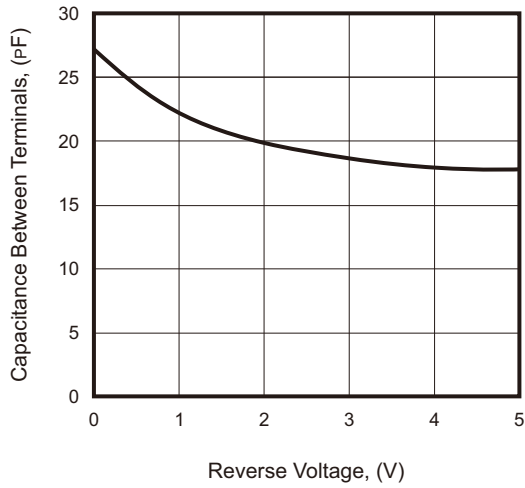
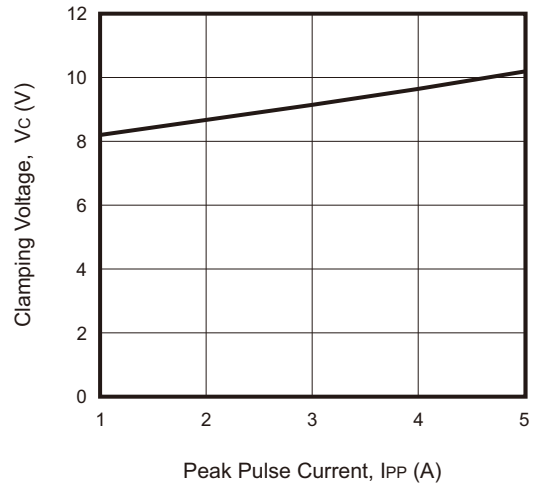
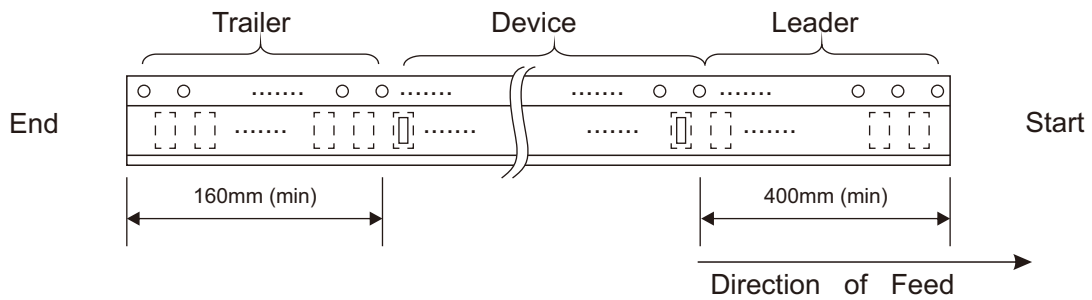
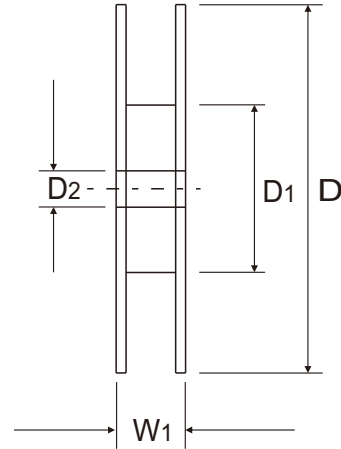
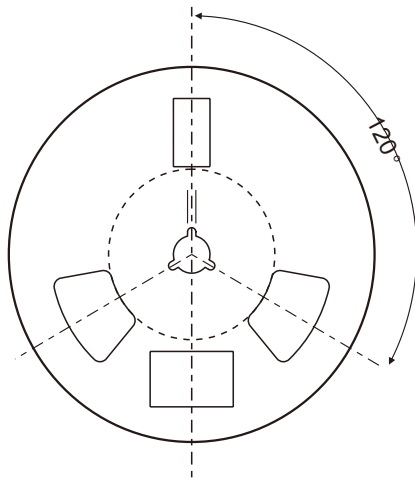
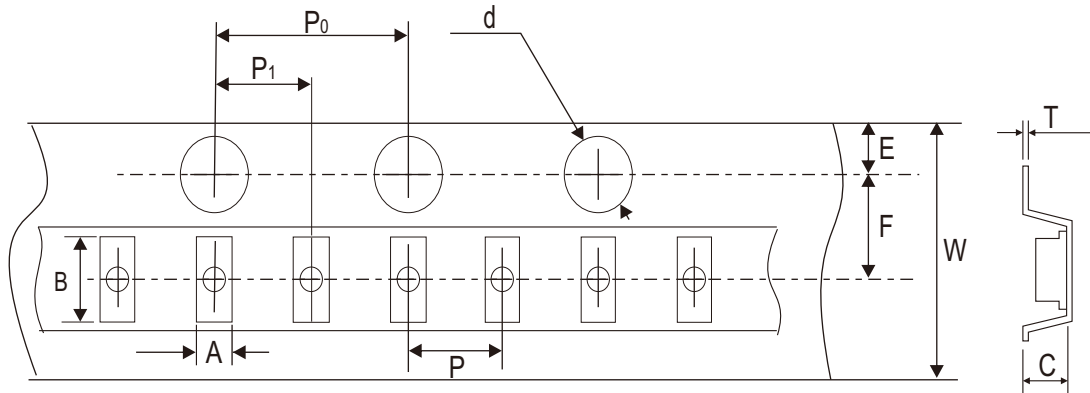


Fig.4 - Typical Clamping Voltage Vs. Peak Pulse Current



## Reel Taping Specification



01005	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.27 ± 0.02	0.49 ± 0.02	0.215 ± 0.02	0.15 + 0.10 - 0.00	178.00 ± 1.00	60.00 ± 0.50	13.50 ± 0.20
	(inch)	0.011 ± 0.001	0.019 ± 0.001	0.008 ± 0.001	0.006 + 0.004 - 0.000	7.008 ± 0.039	2.362 ± 0.020	0.531 ± 0.008

01005	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.05	8.00 + 0.30 - 0.10	12.00 + 0.50 - 0.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.002	0.315 + 0.012 - 0.004	0.472 + 0.020 - 0.000

Company reserves the right to improve product design , functions and reliability without notice.

REV:A

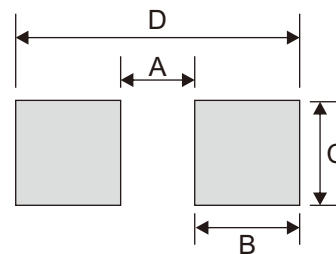
## Marking Code

Part Number	Marking Code
CPDWL5V0-HF	B



## Suggested P.C.B. PAD Layout

SIZE	01005	
	(mm)	(inch)
A	0.12	0.005
B	0.17	0.007
C	0.17	0.007
D	0.46	0.018



## Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
01005	10,000	7

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