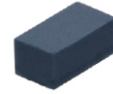


## CPDZ5V0HE-HF

RoHS Device  
Halogen Free



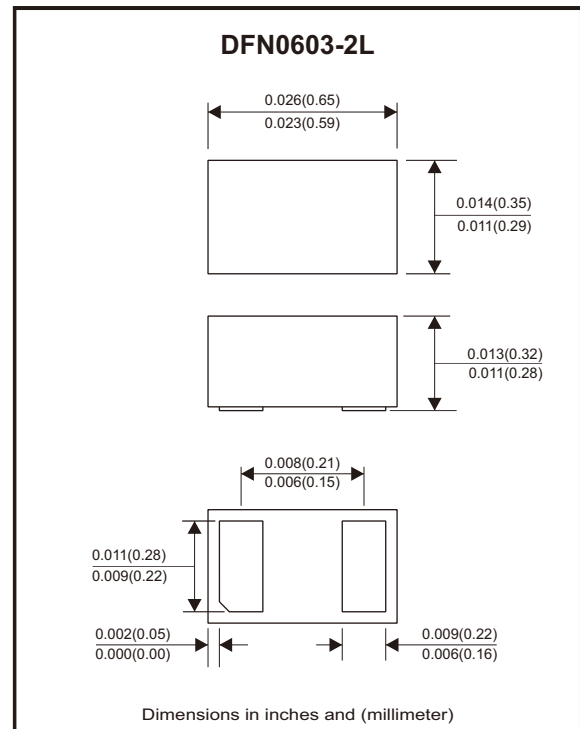
### Features

- Low capacitance: 13.5pF (typ.).
- Reverse standoff voltage: 5V
- IEC 61000-4-2 (air):  $\pm 30$ kV  
IEC 61000-4-2 (contact):  $\pm 30$ kV  
IEC 61000-4-5 (surge): 7A(8/20 $\mu$ s)

### Mechanical data

- Case: DFN0603-2L 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)	$V_{ESD}$	$\pm 30$	kV
Peak pulse power	$T_P = 8/20\mu\text{s}$	$P_{PP}$	70	W
Peak pulse current	IEC 61000-4-5, $T_P = 8/20\mu\text{s}$	$I_{PP}$	7	A
Operating junction temperature range		$T_J$	-55 to +150	$^\circ\text{C}$
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 standoff voltage	I/O to GND	$V_{RWM}$		5		V
Breakdown voltage	$I_R = 1\text{mA}$ , I/O to GND	$V_{BR}$	5.6	6.5	8.4	V
Reverse leakage current	$V_{RWM} = 5\text{V}$ , I/O to GND	$I_R$			100	nA
Surge clamping voltage (8/20 $\mu$ s)	$I_{PP} = 1\text{A}$ , Any I/O to GND (positive)	$V_C$			8	V
	$I_{PP} = 7\text{A}$ , Any I/O to GND (positive)	$V_C$			11	
TLP dynamic resistance	I/O to GND (positive)	$R_{DYN}$		0.19		$\Omega$
Junction capacitance	$V_R = 0\text{V}$ , $f = 1\text{MHz}$ , I/O to GND	$C_J$		13.5	20	pF

## Typical Rating and Characteristic Curves (CPDZ5V0HE-HF)

Fig.1 - Clamping Voltage (TLP)

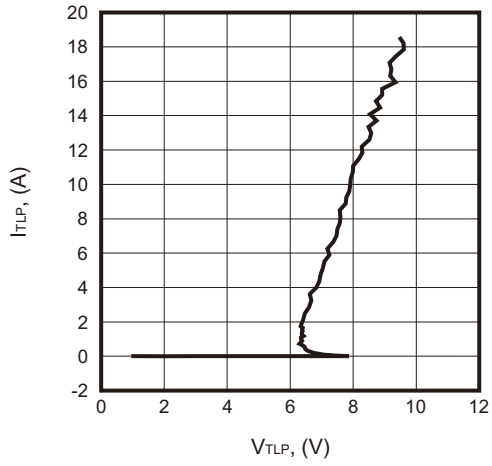


Fig.2 - Junction Capacitance

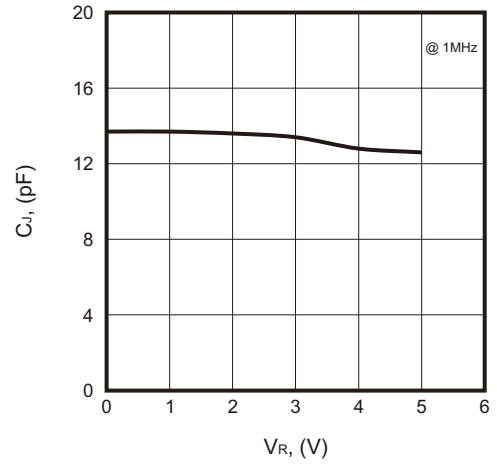
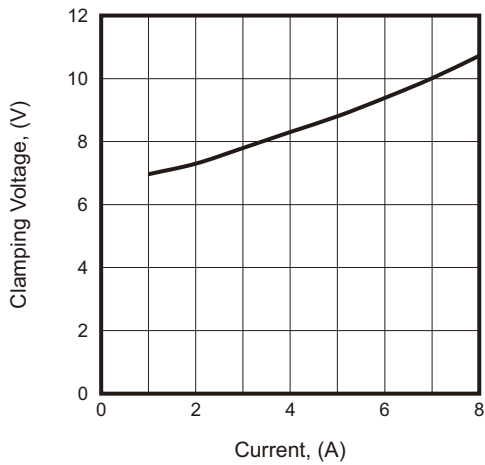
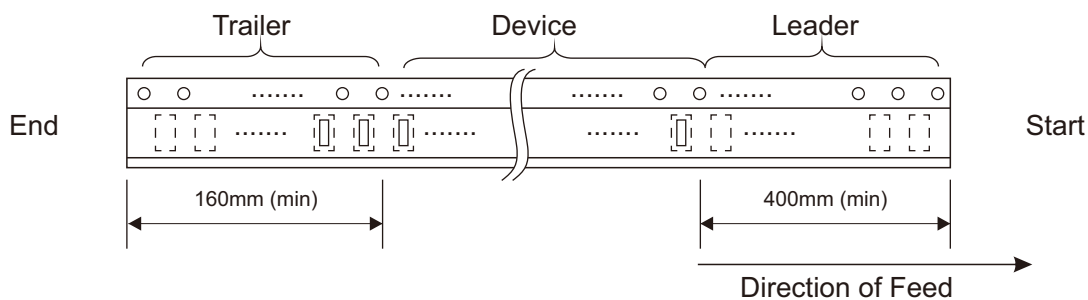
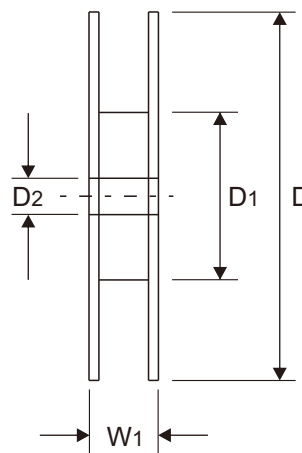
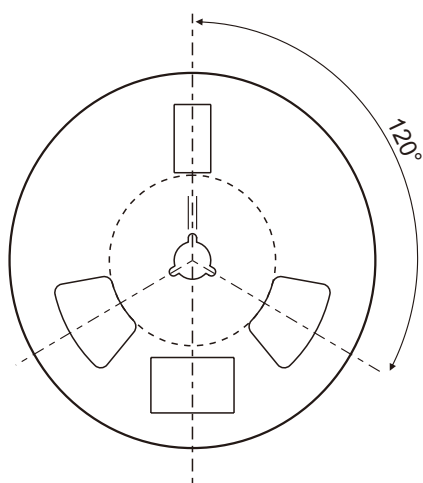
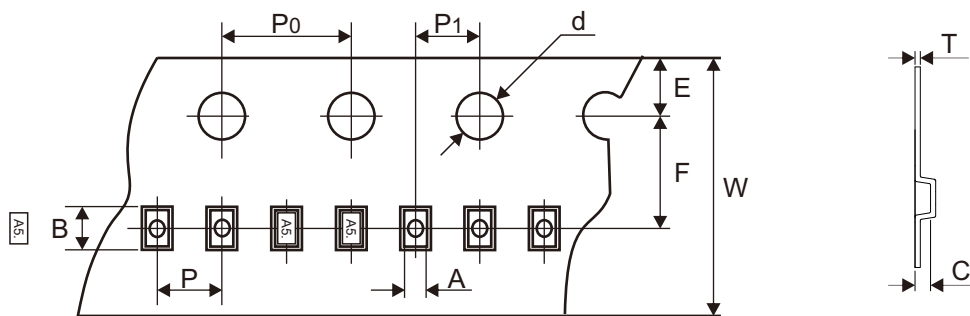


Fig.3 -  $I_{PP}$  vs Clamping Voltage



## Reel Taping Specification



DFN0603 -2L	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.38 ± 0.03	0.68 ± 0.03	0.36 ± 0.03	1.50 + 0.10 - 0.00	178.00 ± 1.00	54.50 ± 0.50	13.00 ± 0.20
	(inch)	0.015 ± 0.001	0.027 ± 0.001	0.014 ± 0.001	0.059 + 0.004 - 0.000	7.008 ± 0.039	2.146 ± 0.020	0.512 ± 0.008

DFN0603 -2L	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 ± 0.02	8.00 + 0.30 - 0.10	11.50 ± 0.50
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.001	0.315 + 0.012 - 0.004	0.453 ± 0.020

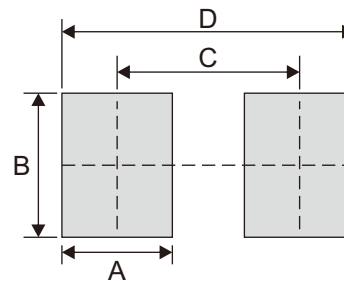
## Marking Code

Part Number	Marking Code
CPDZ5V0HE-HF	A5.

**A5.**

## Suggested P.C.B. PAD Layout

SIZE	DFN0603-2L	
	(mm)	(inch)
A	0.23	0.009
B	0.30	0.012
C	0.38	0.015
D	0.61	0.024



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
DFN0603-2L	15,000	7