

## CPDQT5V0HE-HF

RoHS Device

Halogen Free

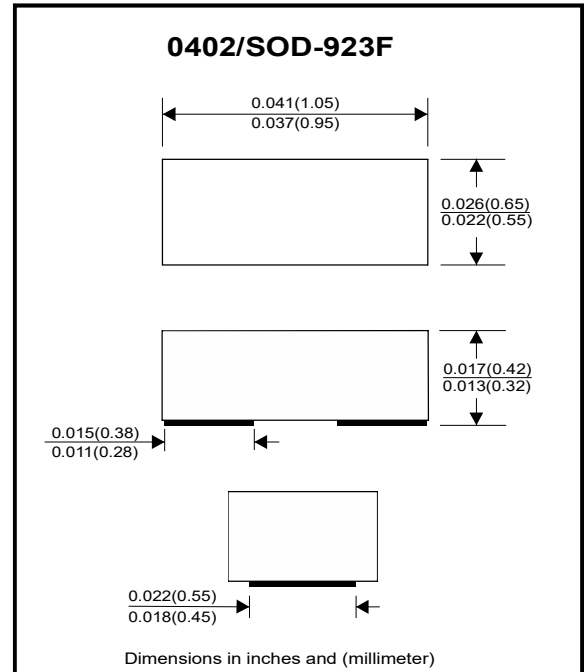


### Features

- Low capacitance: 15pF (typ.)
- Reverse standoff voltage : 5V
- IEC 61000-4-2 (Air): ± 30kV
- IEC 61000-4-2 (Contact): ±30kV
- IEC 61000-4-5 (Surge): 7A (8/20us)
- Schematic Diagram

### Application

- Smart Phone
- Computer
- Wearable
- LCD TV



### Circuit Diagram



### Limiting values (T<sub>A</sub> = 25 °C, unless otherwise specified)

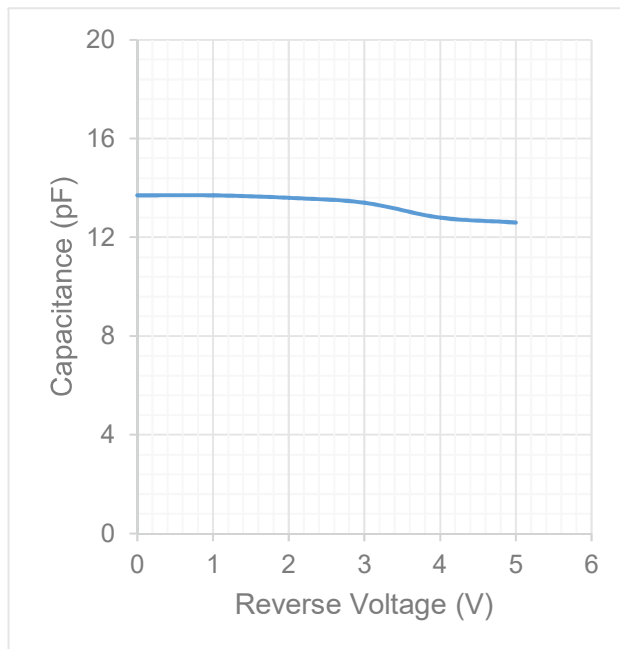
Symbol	Parameter	Conditions	Value	Unit
V <sub>ESD</sub>	Electrostatic discharge voltage	IEC61000-4-2 ;contact discharge	± 30	kV
		IEC61000-4-2 ; air discharge	± 30	kV
P <sub>pp</sub>	Peak pulse power	t <sub>p</sub> = 8/20 μs	65	W
I <sub>pp</sub>	Peak pulse current	IEC 61000-4-5; t <sub>p</sub> = 8/20 μs	7	A
T <sub>J</sub>	Operating junction temperature range		-55 to 150	°C
T <sub>stg</sub>	Storage temperature range		-55 to 150	°C

## Electrical Characteristics

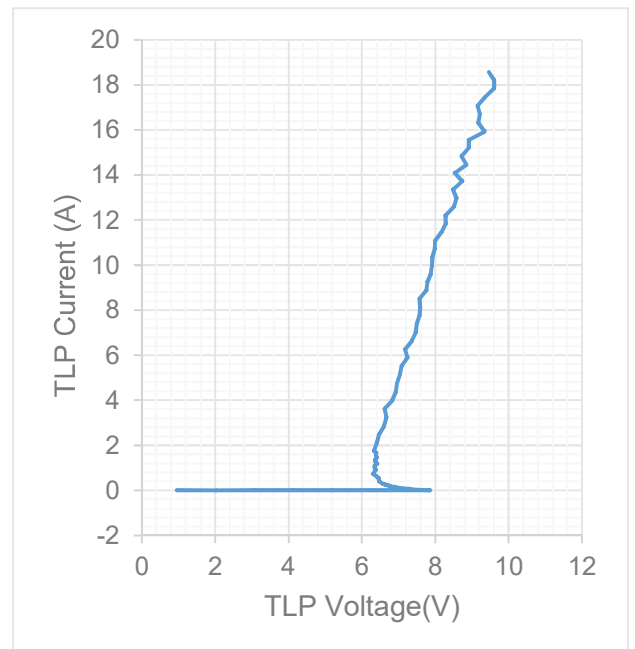
( Ratings at TA=25°C ambient temperature unless otherwise specified.)

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
$V_{RWM}$	Reverse standoff voltage	I/O to GND		5.0		V
$V_{BR}$	Breakdown voltage	$I_R = 1 \text{ mA}$ ; I/O to GND	6.8	7.2	8	V
$I_R$	Reverse leakage current	$V_{RWM} = 5V$ ; I/O to GND			100	nA
$V_c$	Surge clamping voltage (8/20us)	$I_{PP} = 1 \text{ A}$ , Any I/O to GND(positive)			7.2	V
		$I_{PP} = 5 \text{ A}$ , Any I/O to GND(positive)			8.6	V
$R_{DYN}$	TLP dynamic resistance	I/O to GND(positive)		0.19		$\Omega$
$C_J$	Junction capacitance	$V_R = 0V$ , $f = 1 \text{ MHz}$ , I/O to GND		15	22	pF

## Typical Characteristics

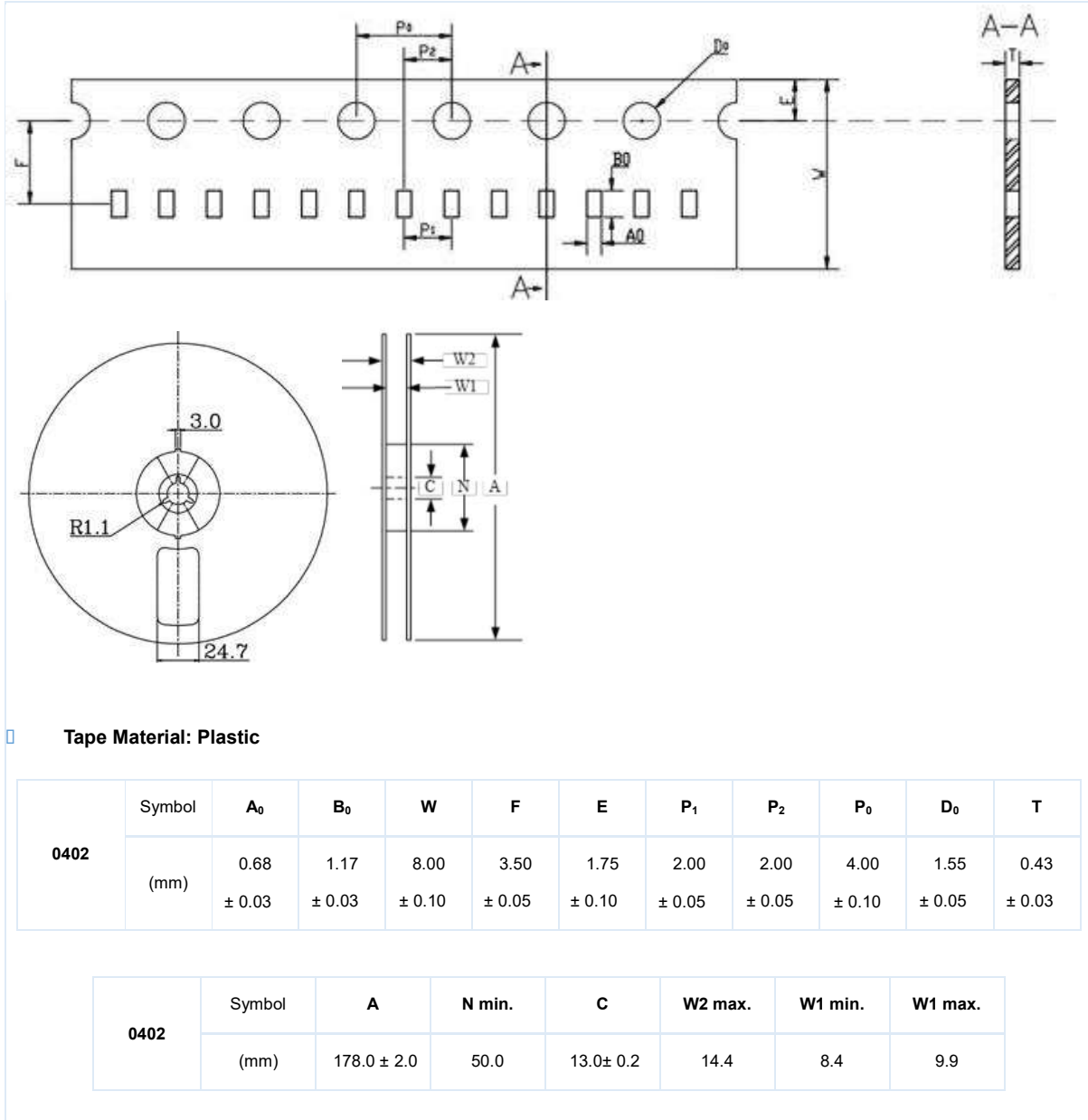


**Fig1.** Capacitance vs. Reverse Voltage @1MHz



**Fig2.** Transmission Line Pulse (tp=100ns)

## Reel Taping Specification



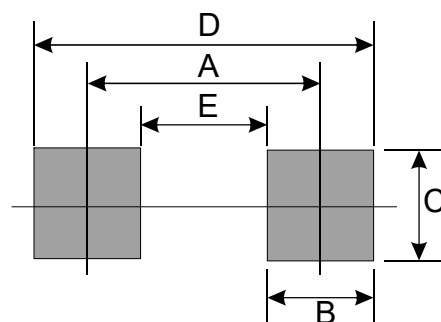
## Marking Code

Part Number	Marking Code
CPDQT5V0HE-HF	PB



## Suggested PAD Layout

SIZE	0402/SOD-923F	
	(mm)	(inch)
A	0.800	0.031
B	0.500	0.020
C	0.650	0.026
D	1.300	0.051
E	0.300	0.012



## Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
0402/SOD-923F	10,000	7