

CPDQT5V0HE-HF

RoHS Device

Halogen Free

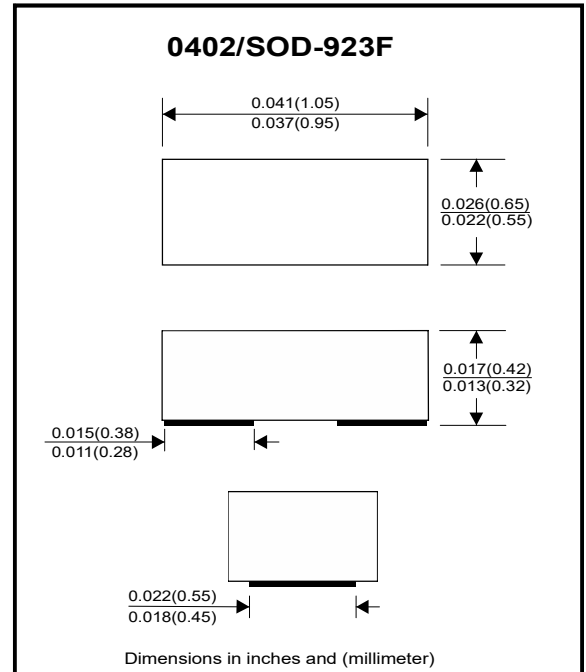


Features

- 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_A = 25 °C, unless otherwise specified)

Symbol	Parameter	Conditions	Value	Unit
V _{ESD}	Electrostatic discharge voltage	IEC61000-4-2 ;contact discharge	± 30	kV
		IEC61000-4-2 ; air discharge	± 30	kV
P _{pp}	Peak pulse power	t _p = 8/20 μs	65	W
I _{pp}	Peak pulse current	IEC 61000-4-5; t _p = 8/20 μs	7	A
T _J	Operating junction temperature range		-55 to 150	°C
T _{stg}	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		Ω
C_J	Junction capacitance	$V_R = 0V$, $f = 1 \text{ MHz}$, I/O to GND		15	22	pF

Typical Characteristics

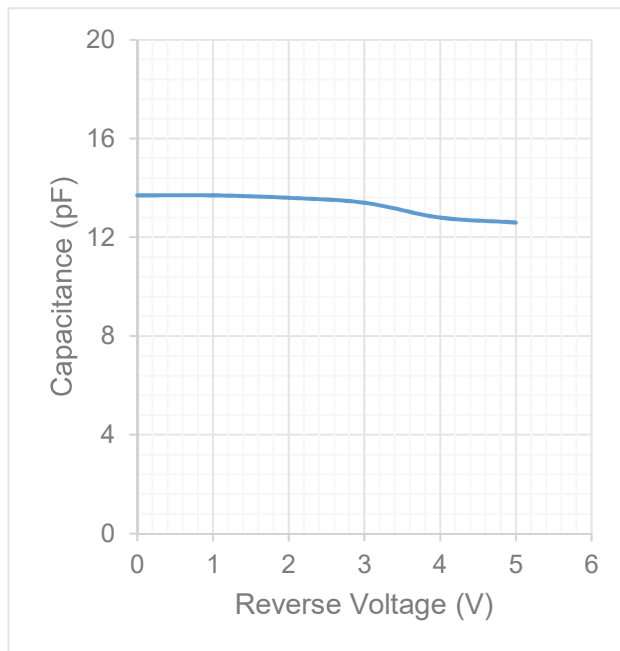


Fig1. Capacitance vs. Reverse Voltage @1MHz

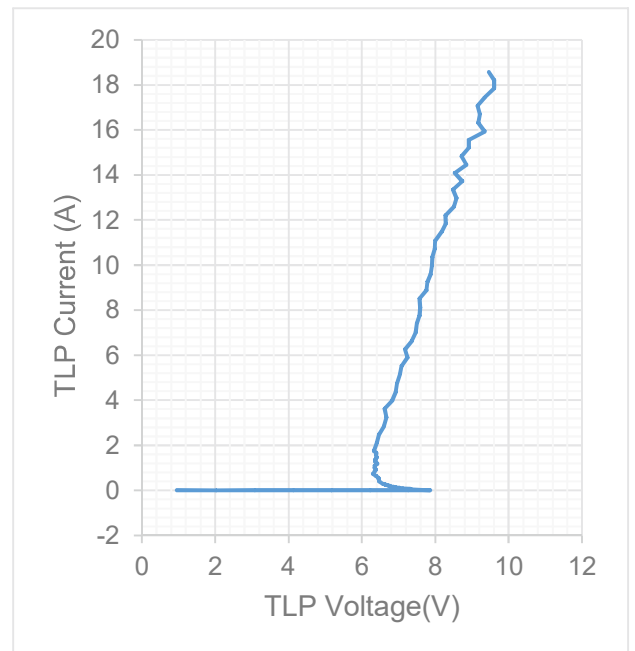
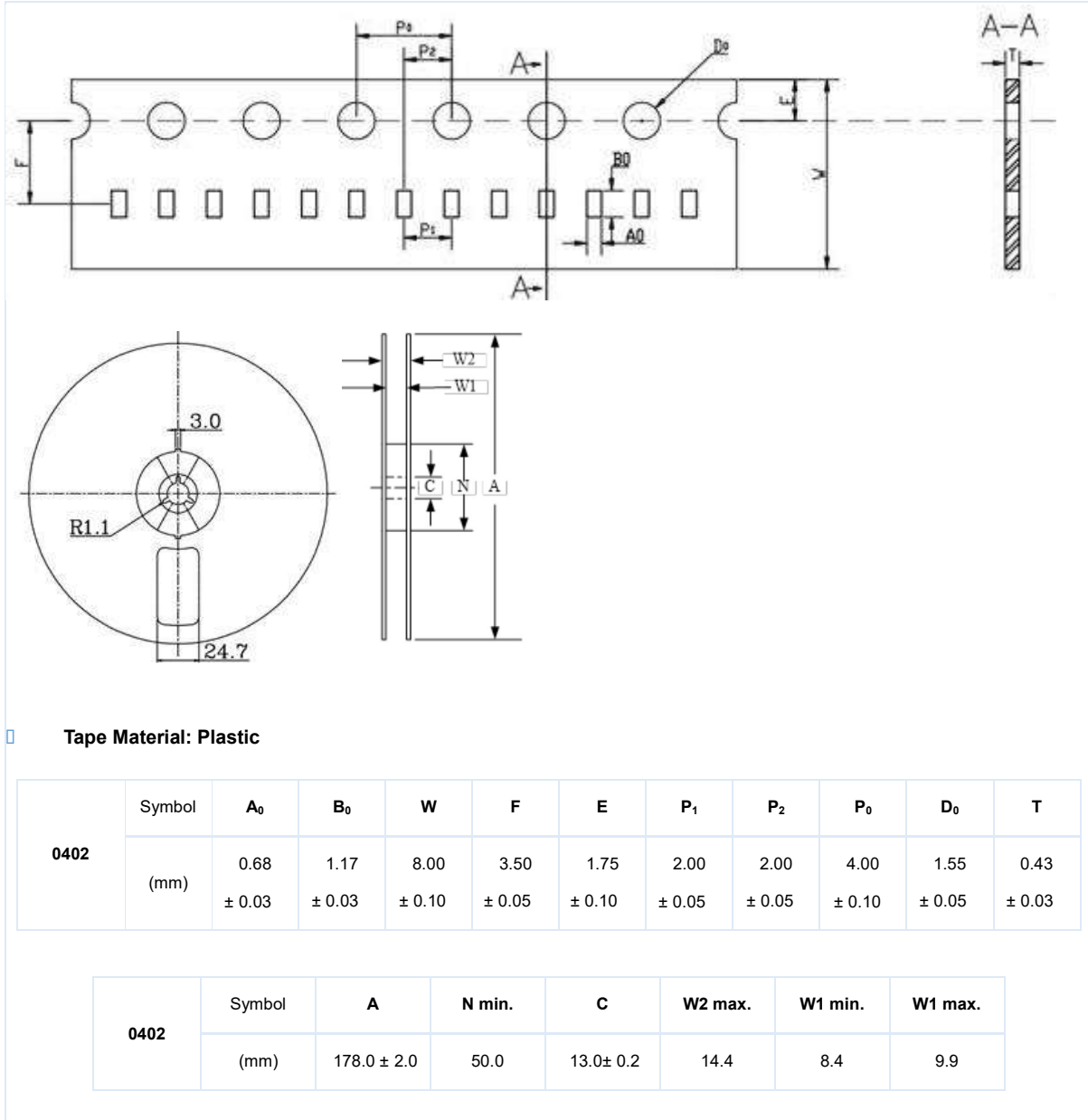


Fig2. Transmission Line Pulse (tp=100ns)

Reel Taping Specification



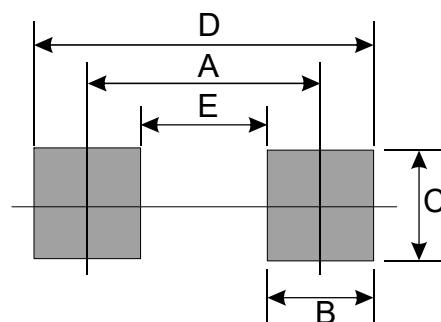
Marking Code

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