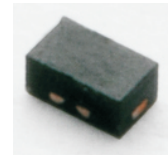


# CPDQT5V0SP-HF

RoHS Device

Halogen Free

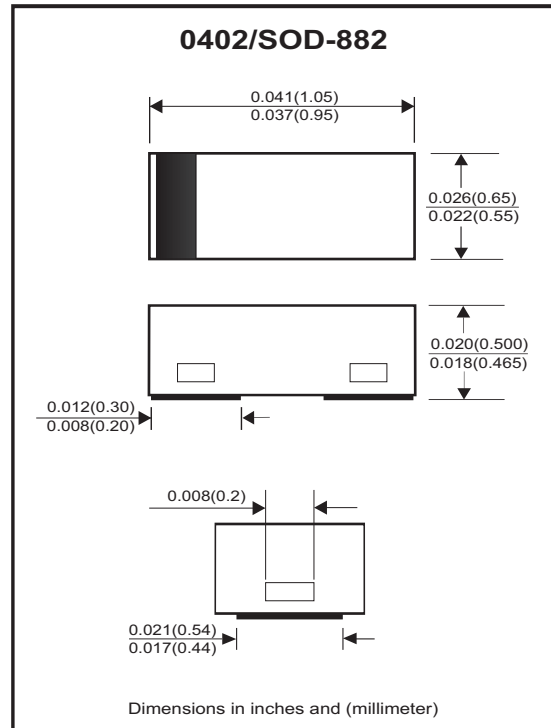


## Features

- IEC61000-4-2 Level 4 ESD protection.
- ESD Rating of Class 3 (>16kV) per Human Body Mode.
- Super low capacitance 0.5 pF
- Low clamping voltage.
- Small body outline dimensions:  
0.039" x 0.024"(1.00mm\*0.6mm)

## Mechanical data

- Epoxy: Meets UL 94V-0
- Case: 0402/SOD-882 small outline plastic package.  
Void-free, Transfer-molded, Thermosetting plastic.
- Lead finish: Ni-Pd-Au
- Mounting position: Any.
- High temperature soldering guaranteed: 260°C/10 second.



## Circuit Diagram



## Maximum Rating and Electrical Characteristics

(at TA=25°C unless otherwise noted, VF=1.0V Max. @ IF=10mA for all types)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Working Peak Reverse Voltage		VRWM			5.0	V
Breakdown voltage	IR = 1mA	VBR	5.4			V
Maximum reverse leakage current	VR = 5V	IR			1.0	µA
Junction capacitance	VR = 0V, f = 1MHz	CT		0.5	0.9	pF
ESD capability	IEC 61000-4-2(air)	ESD			15	kV
	IEC 61000-4-2(Contact)	ESD			10	kV
Clamping Voltage	I <sub>PP</sub> = 1 A, tp=8/20us	Vc			12.9	V
Total power dissipation on FR-5 board (Note 1)	TA=25°C	Pd			150	mW
Junction temperature		Tj	-55		125	°C
Storage temperature		TSTG	-55		150	°C

NOTES: 1. FR-5=1.0\*0.75\*0.62in.  
2. VBR is measured with a pulse test current IR at an ambient temperature of 25°C.  
3. Surge current waveform per Figure1.

## RATING AND CHARACTERISTIC CURVES (CPDQT5V0SP-HF )

Fig.1- Pulse Waveform

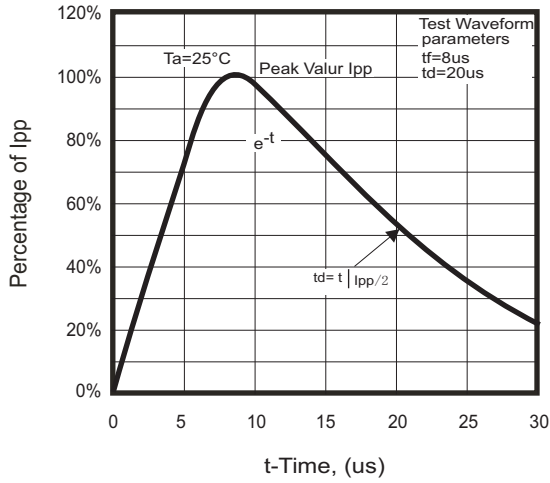
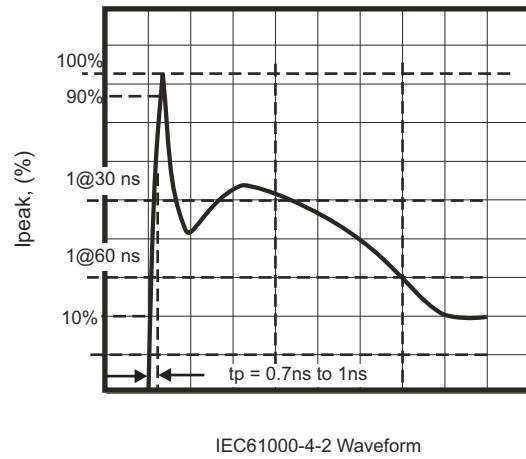
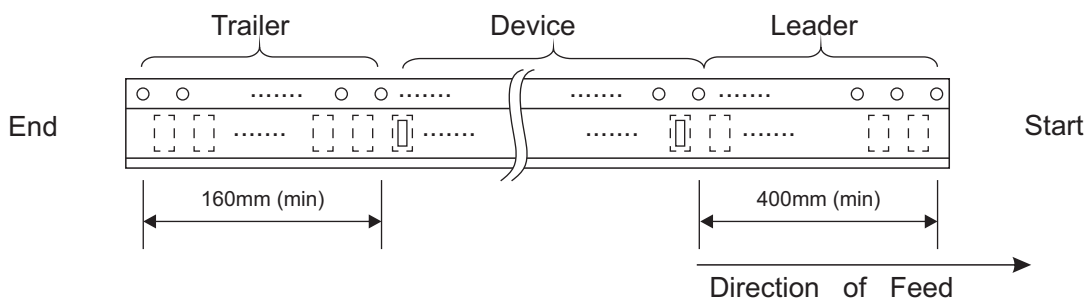
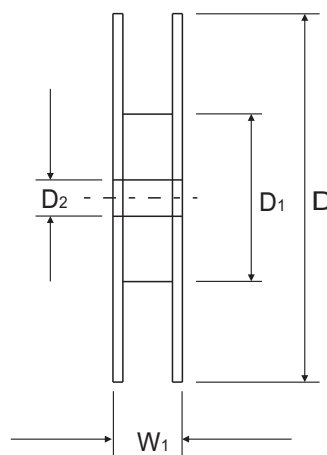
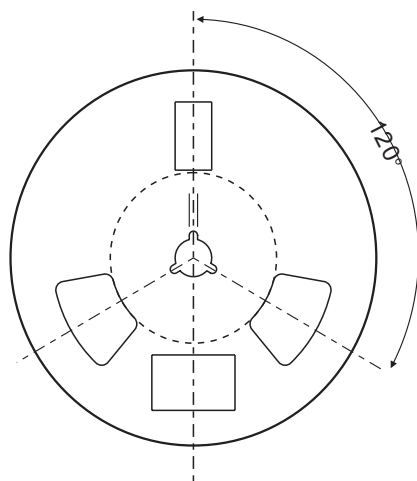
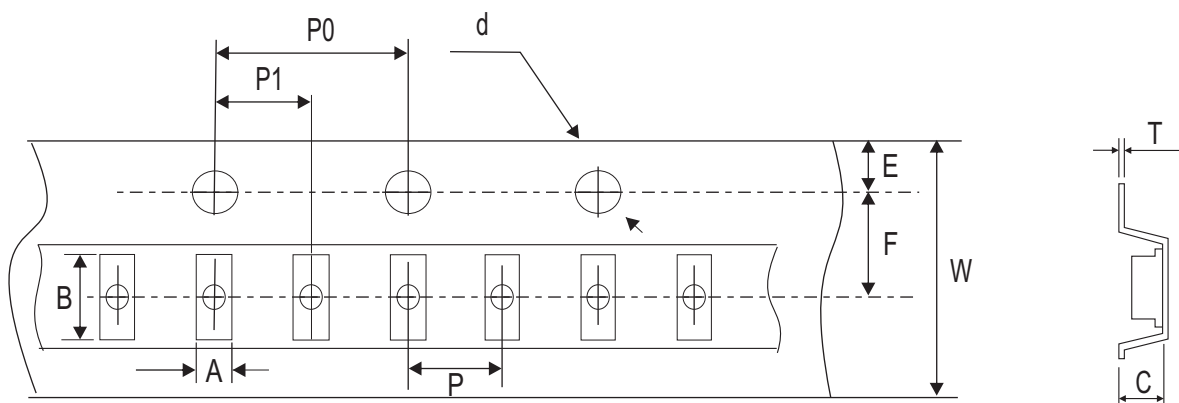


Fig.2 - IEC61000-4-2 Waveform



## Reel Taping Specification

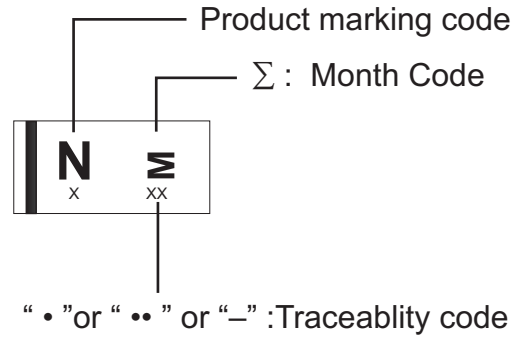


	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
0402 (SOD-882)	(mm)	0.70 ± 0.05	1.12 ± 0.05	0.55 ± 0.05	1.50 + 0.10 - 0	178.00 Max.	50.00 Min.	13.00 ± 0.50
	(inch)	0.028 ± 0.002	0.044 ± 0.002	0.022 ± 0.002	0.059 + 0.004 - 0	7.008 Max.	1.969 Min.	0.512 ± 0.020

	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W
0402 (SOD-882)	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	0.229 ± 0.02	8.30 Max.	10.90 Max.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.009 + 0.001	0.327 Max.	0.429 Max.

## Marking Code

Part Number	Marking Code
CPDQT5V0SP-HF	N



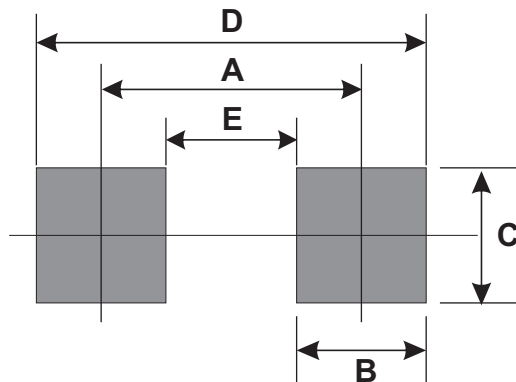
## Month Code:

Month	Odd Year (per A.D.)	Even Year (per A.D.)
Jan	1	E
Feb	2	F
Wer	3	H
Apr	4	J
May	5	K
Jun	6	L

Month	Odd Year (per A.D.)	Even Year (per A.D.)
Jul	7	N
Aug	8	P
Sep	9	U
Oct	T	X
Nov	V	Y
Dec	C	Z

## Suggested PAD Layout

SIZE	0402/SOD-882	
	(mm)	(inch)
A	0.70	0.035
B	0.40	0.012
C	0.70	0.016
D	1.10	0.047
E	0.30	0.024



## Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
0402/SOD-882	10,000	7

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Comchip manufacturer](#):*

Other Similar products are found below :

[CDBB260-G](#) [CPDA10R5V0P-HF](#) [CDBA340L-HF](#) [CDBU0520-HF](#) [ACGRC307-HF](#) [1N5819T-G](#) [P6KE550CA-HF](#) [CDBM140-HF](#)  
[CDBMT1100-HF](#) [CZRU52C5V6](#) [CDBF0245](#) [CDBU0530-HF](#) [CPDU5V0U-HF](#) [CDBB540-HF](#) [CZRU52C3V9](#) [ACDBA1200-HF](#)  
[CDBHM140L-HF](#) [ACGRKM4007-HF](#) [CPDU12V-HF](#) [CDBMT160-HF](#) [CZRER52C2](#) [ACPDQC5V0C-HF](#) [1.5KE36A-G](#) [CDBQR0230L-HF](#)  
[CPDU5V0-HF](#) [CDBHM160L-HF](#) [CZRU52C13-HF](#) [CZRU5V1B](#) [CDBA2200-HF](#) [CDBQR54-HF](#) [ZENER-KIT](#) [CGRA4004-G](#) [CGRM4007-](#)  
[HF](#) [KBPC1501-G](#) [CURMT104-HF](#) [CDBQR70-HF](#) [CDBA140-HF](#) [CDSQR4148-HF](#) [KBPC2504-G](#) [ACGRAS1W-HF](#) [CDBUR0140L-HF](#)  
[ACDBA560-HF](#) [KBPC5004-G](#) [ACGRA4001-HF](#) [CDBUR70](#) [DB106-G](#) [KBPC1502-G](#) [TV02W280B-HF](#) [DF06-G](#) [CDBU0130-HF](#)