



**THE DATASHEET OF  
CPDA10R5V0U-HF**



## CPDA10R5V0U-HF

RoHS Device

Halogen Free

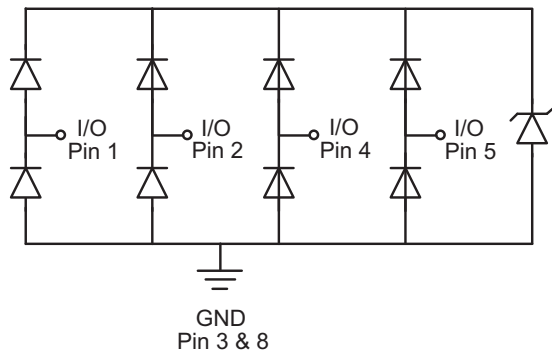
### Features

- IEC61000-4-2 (ESD)±18kV(Contact), ±18kV(Air).
- Working voltage: 5 V
- Low leakage current.
- Low capacitance: 0.4 pF typical (I/O to GND)

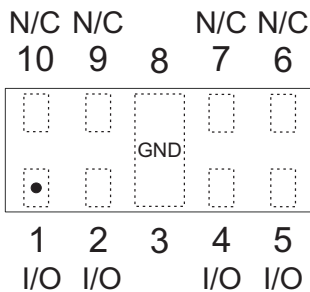
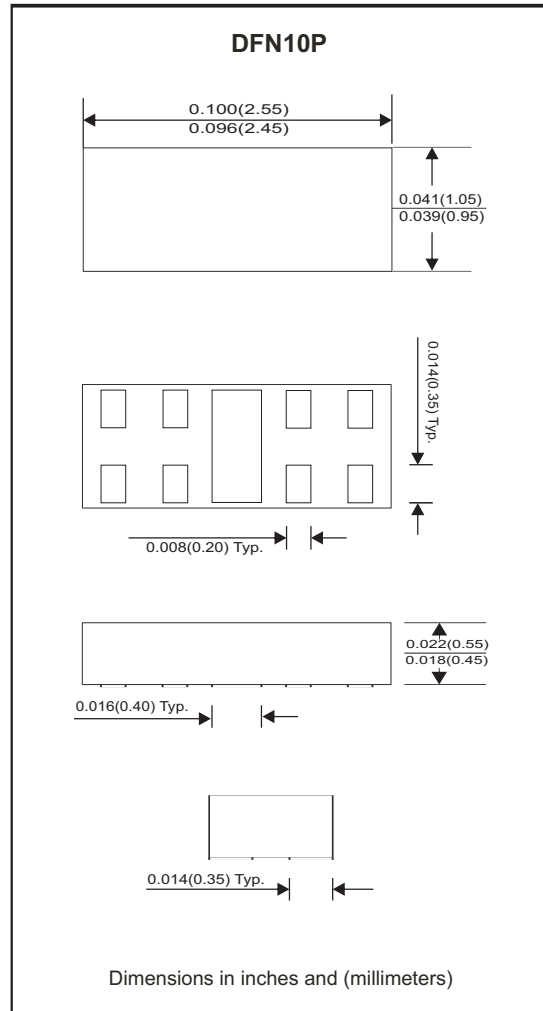
### Mechanical data

- Case: DFN10p package,molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750,method 2026.
- Mounting position: Any

### Circuit Diagram



### Package



● = Pin 1 indicator

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

Parameter	Symbol	Value	Unit
Peak pulse power ( tp = 8/20 us)	PPP	100	W
Peak pulse current ( tp = 8/20 us)	IPP	4	A
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	ESD	18 18	kV
Operating temperature	TJ	-55 to +125	°C
Storage temperature	TSTG	-55 to +150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-off voltage		VRWM			5	V
Breakdown Voltage	IR = 1 mA	VBR	6.0			V
Leakage current	VR = 5.0V	IL		0.05	0.1	uA
Clamping voltage	IPP = 1 A, Tp=8/20us, Any Channel Pin to Ground	Vc		9		V
	IPP = 4 A, Tp=8/20us, Any Channel Pin to Ground	Vc		13.5		V
Junction capacitance	VR = 0 V, f = 1MHz Any Channel Pin to Ground	Cj		0.4		pF

## RATING AND CHARACTERISTIC CURVES (CPDA10R5V0U-HF)

Fig.1 - 8/20us Peak Pulse Current Waveform ACC. IEC 61000-4-5

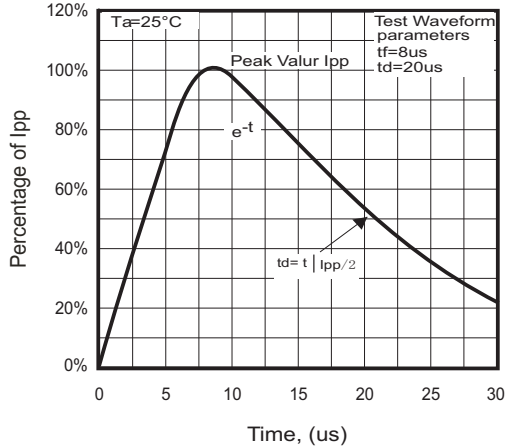


Fig.2 - Forward Characteristics

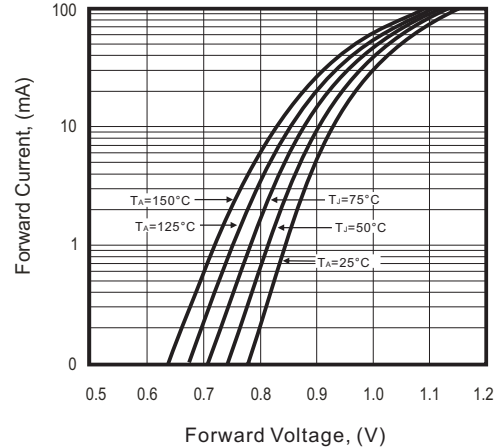


Fig.3 - Clamping Voltage Vs. Peak Pulse Current

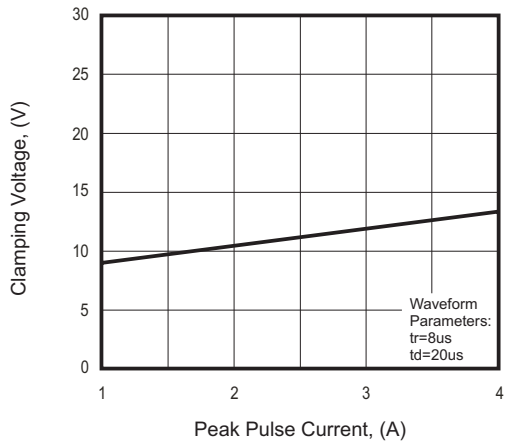


Fig.4 - Power Rating Derating Curve

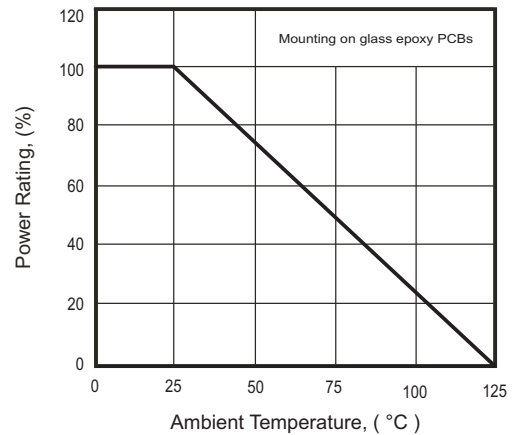
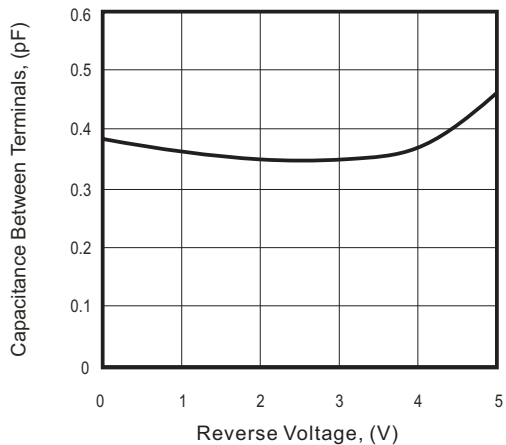
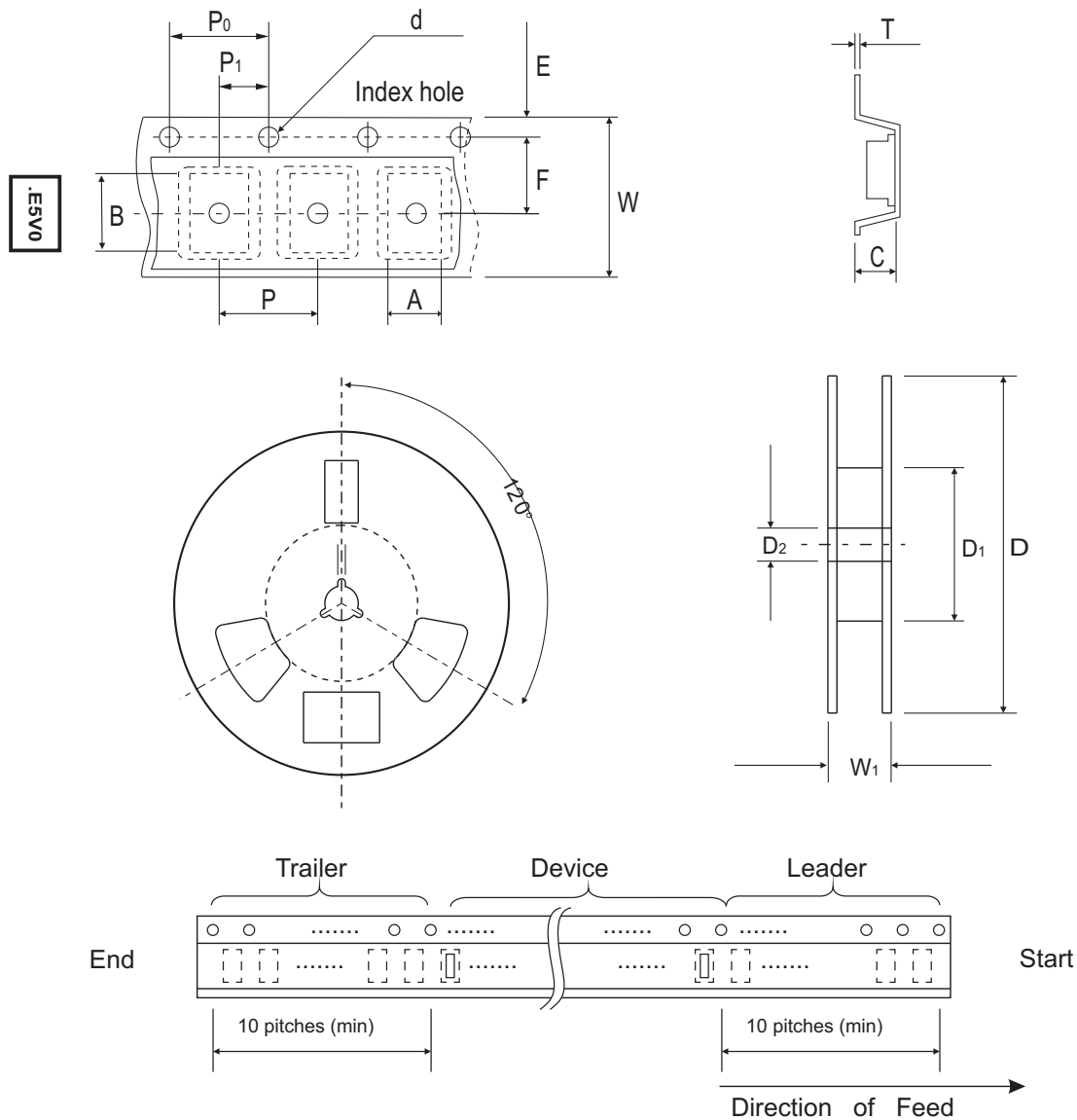


Fig.5 - Typical Capacitance Between Terminals Characteristics



## Reel Taping Specification



DFN10P	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	1.14 ± 0.05	2.64 ± 0.05	0.64 ± 0.05	1.50 + 0.10 - 0	178.00 ± 1.00	60.00 + 0.50 - 0	13.00 ± 0.20
	(inch)	0.045 ± 0.002	0.104 ± 0.002	0.025 ± 0.002	0.059 + 0.004 - 0	7.008 ± 0.039	2.362 + 0.020 - 0	0.512 ± 0.008

DFN10P	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.05	8.00 ± 0.30	12.00 ± 0.15
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.002	0.315 ± 0.012	0.472 ± 0.006

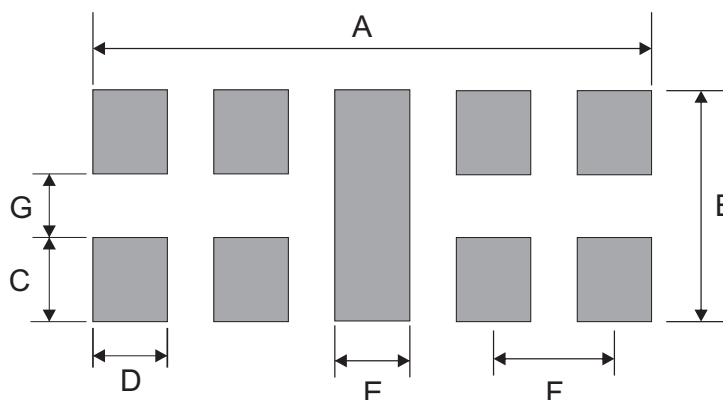
## Marking Code

Part Number	Marking Code
CPDA10R5V0U-HF	.E5V0



## Suggested PAD Layout

SIZE	DFN10P	
	(mm)	(inch)
A	2.30	0.091
B	1.00	0.039
C	0.38	0.015
D	0.30	0.012
E	0.30	0.012
F	0.50	0.020
G	0.24	0.009



## Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
DFN10P	3,000	7

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