

## CPDA10R5V0U-HF

**RoHS Device**  
**Halogen Free**



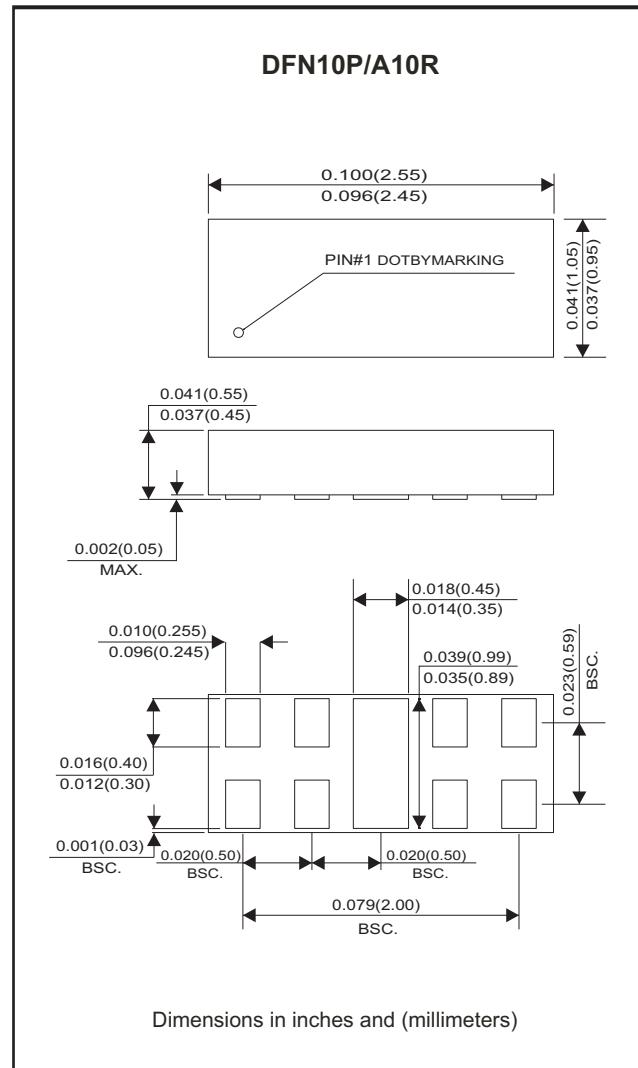
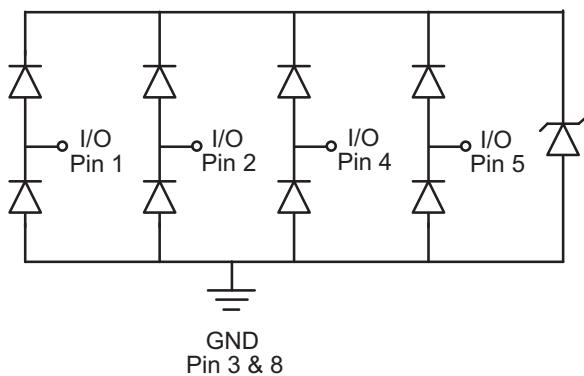
### Features

- IEC61000-4-2 (ESD)±15kV(Contact)
- Working voltage: 5 V
- Low leakage current.
- Low capacitance: 0.5 pF typical (I/O to GND)

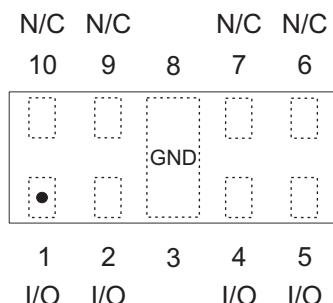
### Mechanical data

- 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 $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power ( tp = 8/20us)	PPP	90	W
Peak pulse current ( tp = 8/20us)	IPP	5	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	ESD	±15	kV
Operating temperature range	T <sub>J</sub>	-55 to +125	°C
Storage temperature range	T <sub>TG</sub>	-55 to +150	°C

## Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-off voltage		V <sub>RWM</sub>			5	V
Forward voltage	I <sub>F</sub> = 10 mA	V <sub>F</sub>			1.2	V
Breakdown voltage	I <sub>T</sub> = 1 mA	V <sub>BR</sub>	6			V
Leakage current	V <sub>RWM</sub> = 5V	I <sub>R</sub>			0.1	uA
Clamping voltage	I <sub>PP</sub> = 1A, T <sub>P</sub> = 8/20us, I/O Pin to GND	V <sub>C</sub>		9	12	V
	I <sub>PP</sub> = 5A, T <sub>P</sub> = 8/20us, I/O Pin to GND	V <sub>C</sub>		15	18	V
Junction capacitance	V <sub>R</sub> = 0V, f = 1MHz I/O Pin to GND	C <sub>j</sub>		0.5	0.7	pF

## RATING AND CHARACTERISTIC CURVES (CPDA10R5V0U-HF)

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

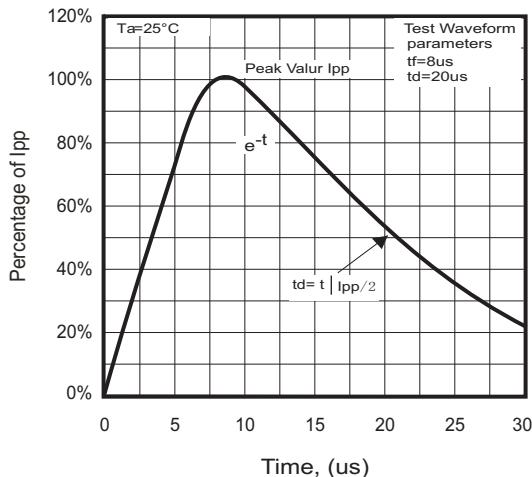


Fig.2 - Forward Characteristics

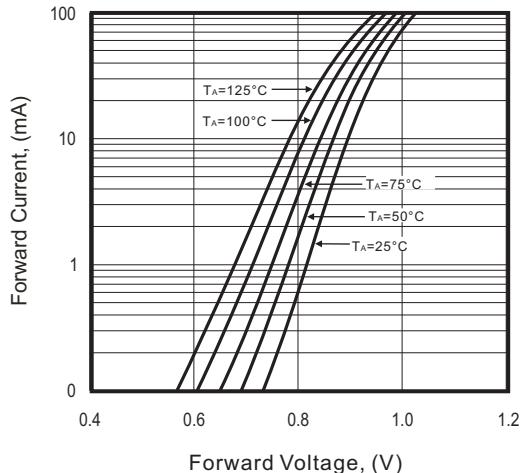


Fig.3 - Typical Clamping Voltage Vs.  
Peak Pulse Current

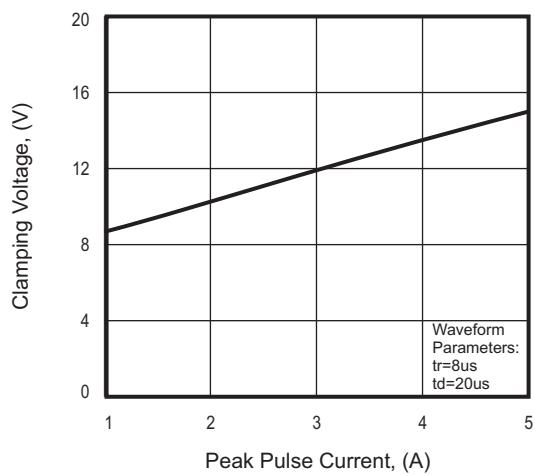


Fig.4 - Power Rating Derating Curve

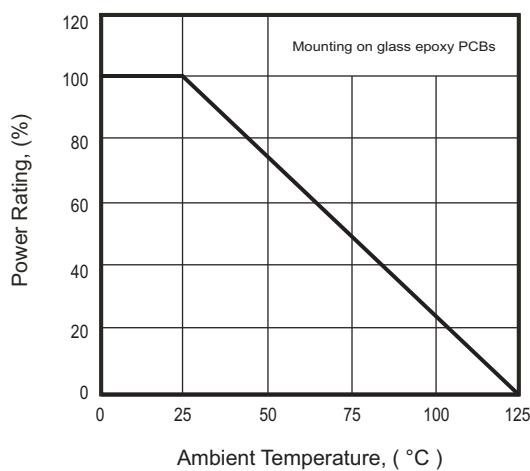
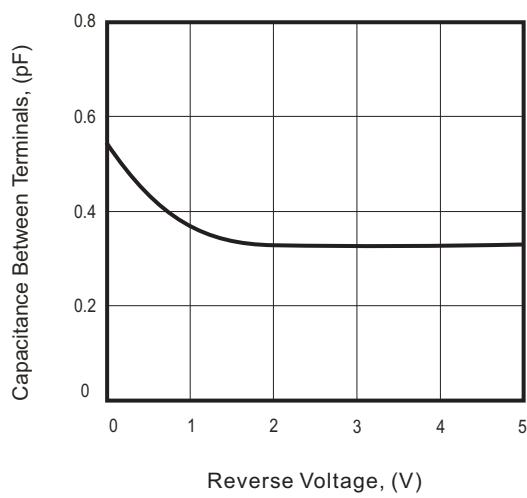
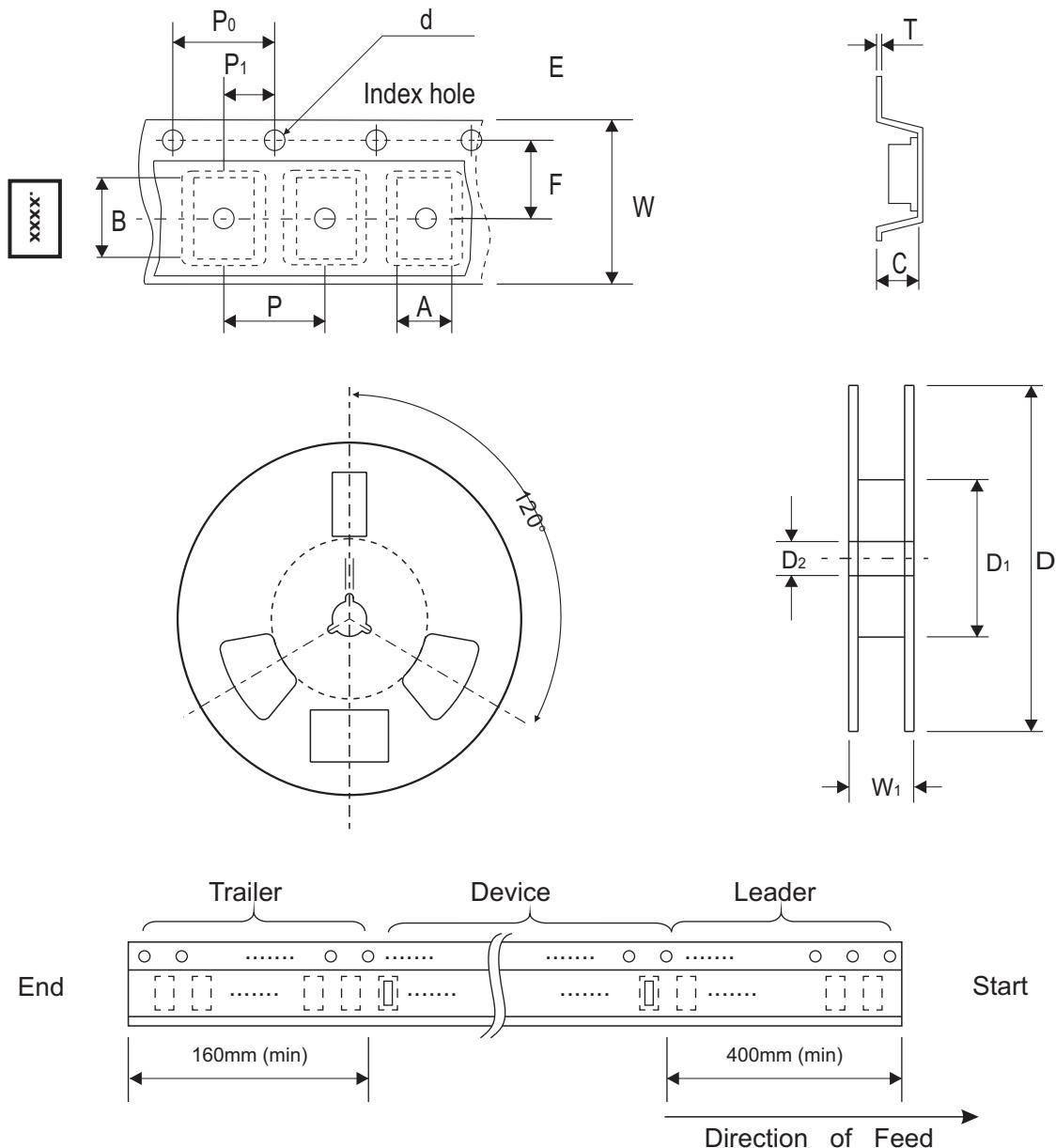


Fig.5 - Typical Capacitance Between  
Terminals Characteristics



## 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	13.50 ± 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	0.531 ± 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 + 0.50 - 0
	(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 + 0.020 - 0

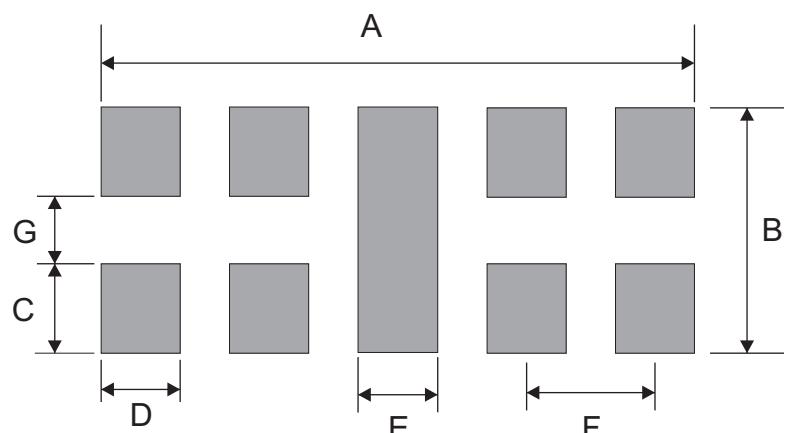
## Marking Code

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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