

## CPDA10R3V3U-HF

RoHS Device

Halogen Free



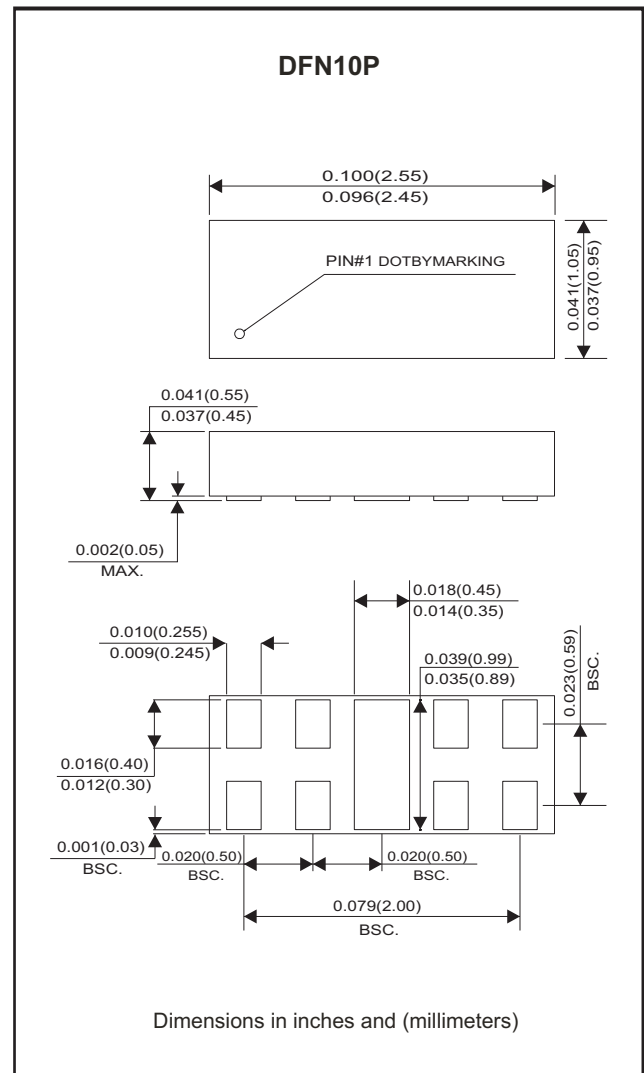
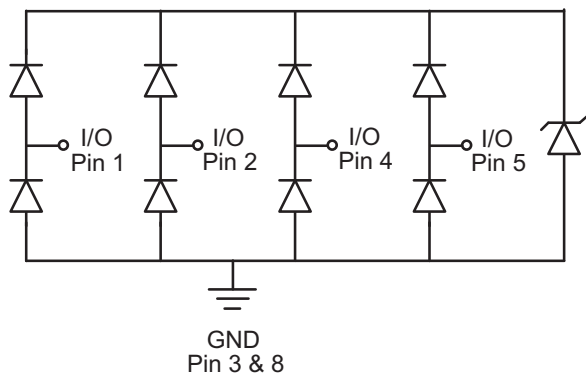
### Features

- IEC61000-4-2 (ESD) $\pm$ 15kV(Contact)
- Working voltage: 3.3 V
- Low leakage current.
- Low capacitance: 0.5 pF typical (I/O to GND)

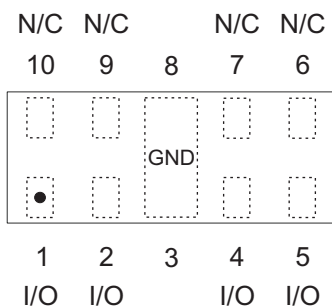
### Mechanical data

- 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 TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power ( tp = 8/20 us)	PPP	55	W
Peak pulse current ( tp = 8/20 us)	IPP	5	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	ESD	±15	kV
Operating temperature range	TJ	-55 to +125	°C
Storage temperature range	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			3.3	V
Forward voltage	IF = 10 mA	VF			1.2	V
Breakdown voltage	IT = 1 mA	VBR	4			V
Leakage current	VRWM = 3.3V	IR			0.5	uA
Clamping voltage	IPP = 1A, TP = 8/20us, I/O Pin to GND	VC		5.6	6.5	V
	IPP = 5A, TP = 8/20us, I/O Pin to GND	VC		9	11	V
Clamping voltage	IPP = 8A, TP = 100ns, I/O Pin to GND	VCL		9.3		V
	IPP = 16A, TP = 100ns, I/O Pin to GND	VCL		13		V
Dynamic resistance	I/O Pin to GND	RDYN		0.46		Ω
Junction capacitance	VR = 0V, f = 1MHz I/O Pin to GND	Cj		0.5	0.7	pF

## RATING AND CHARACTERISTIC CURVES (CPDA10R3V3U-HF)

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

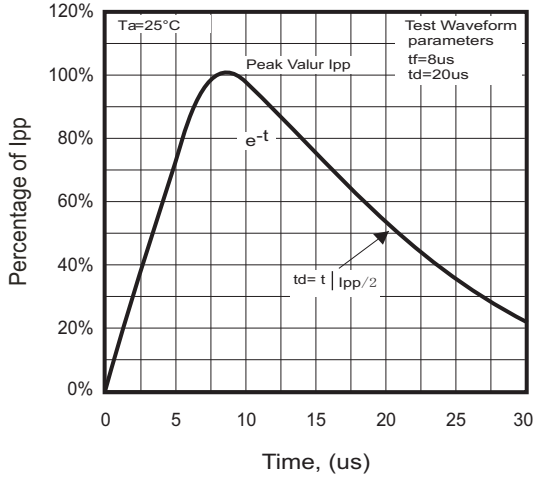


Fig.2 - Forward Characteristics

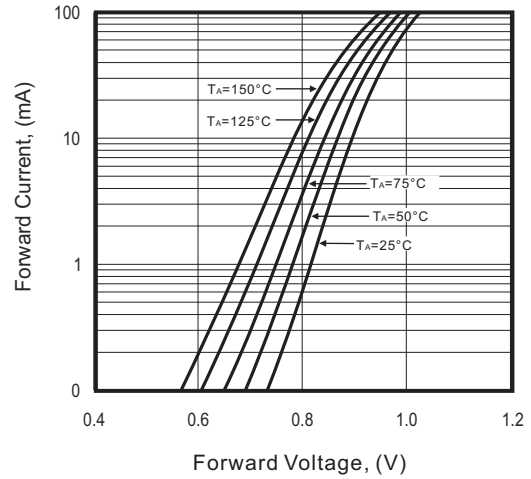


Fig.3 - Clamping Voltage Vs. Peak Pulse Current

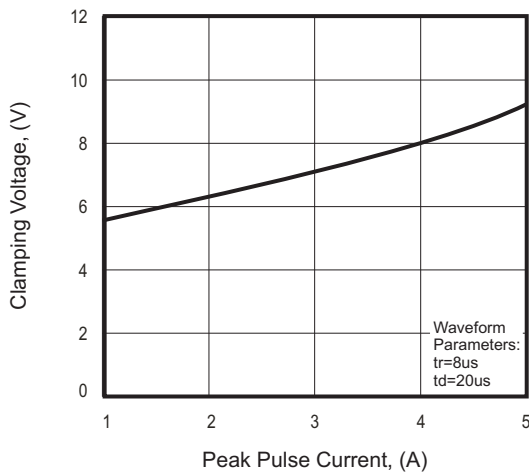


Fig.4 - Power Rating Derating Curve

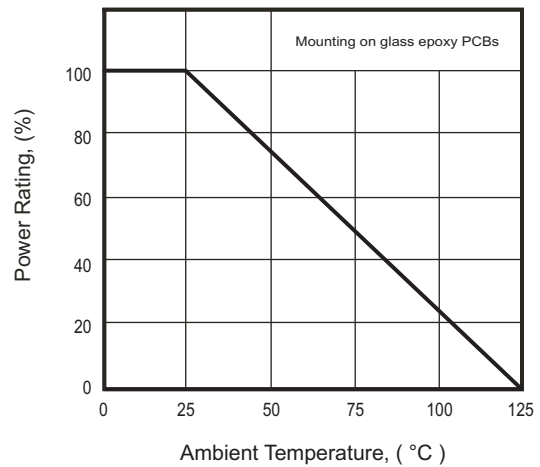


Fig.5 - Typical Capacitance Between Terminals Characteristics

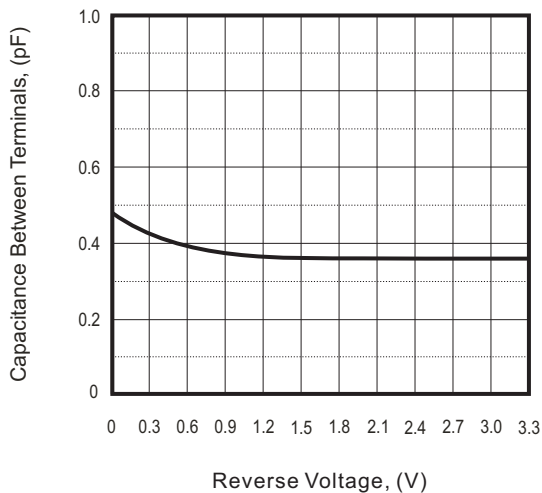
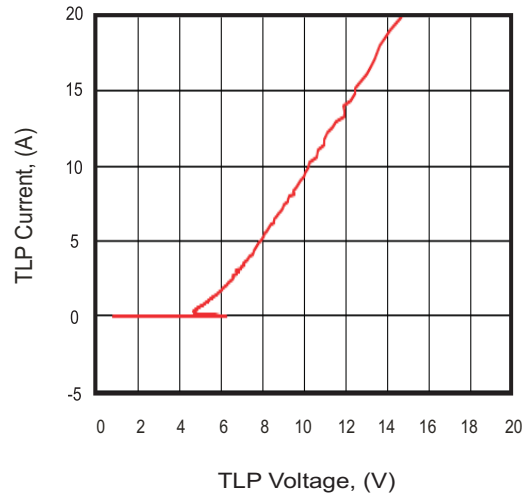
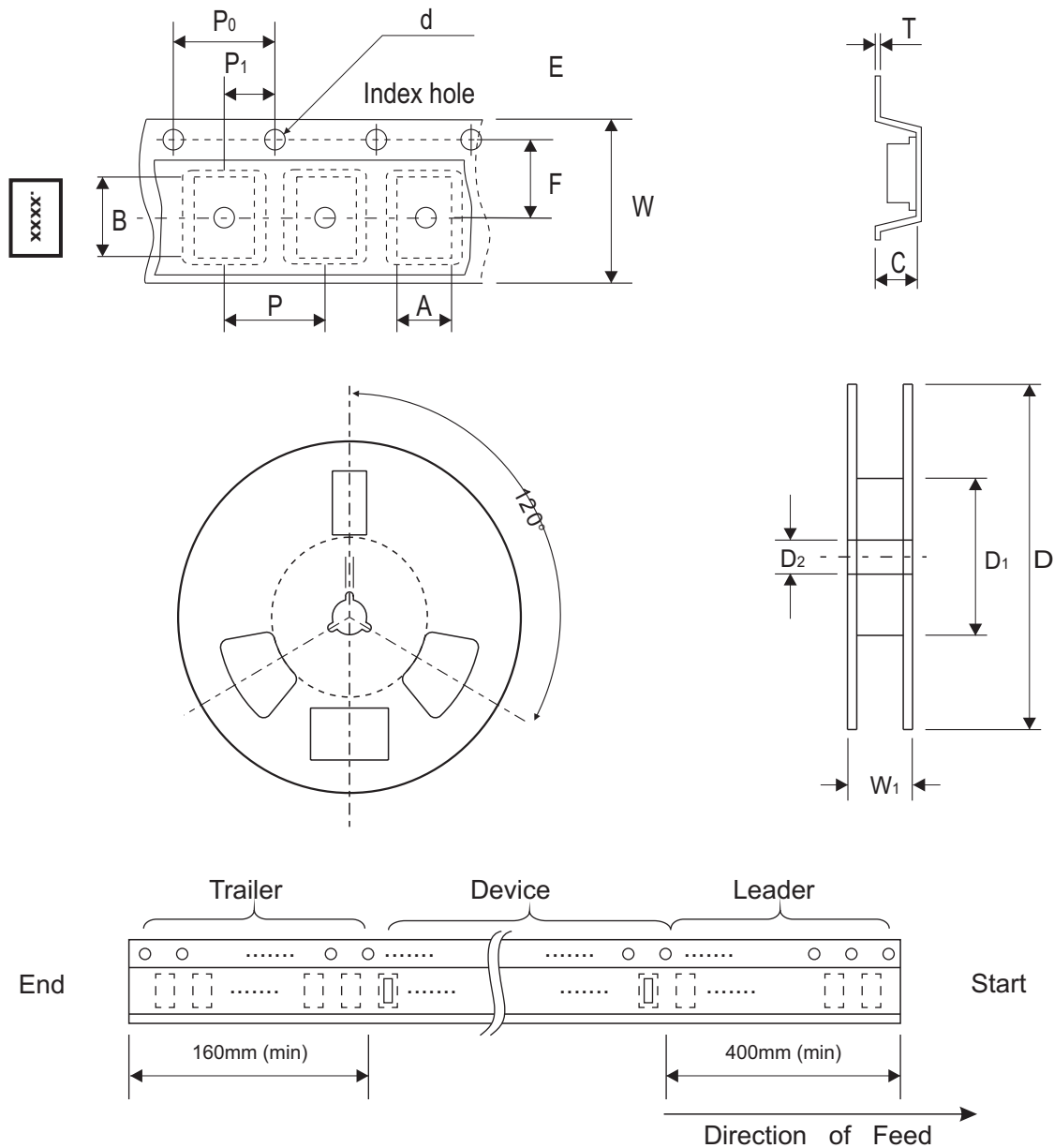


Fig.6 - TLP IV Curve



## 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

Company reserves the right to improve product design, functions and reliability without notice.

REV:B

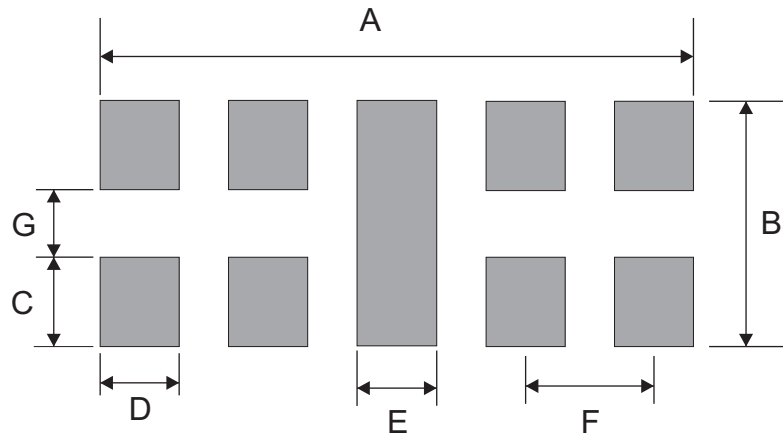
## Marking Code

Part Number	Marking Code
CPDA10R3V3U-HF	.E3V3



## 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