

## CPDA10R5V0SP-HF

RoHS Device

Halogen Free

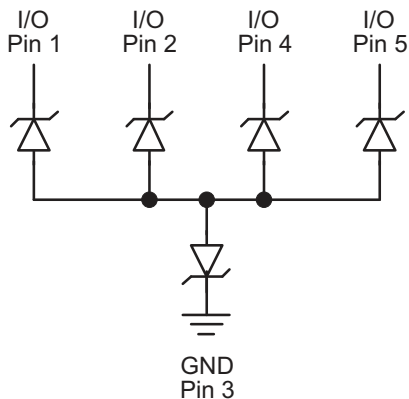
### Features

- IEC61000-4-2 (ESD)±14kV(Contact),±15kV(Air).
- Working voltage: 5.0 V
- Low leakage current.
- Low capacitance: 0.15 pF typical (I/O to GND)

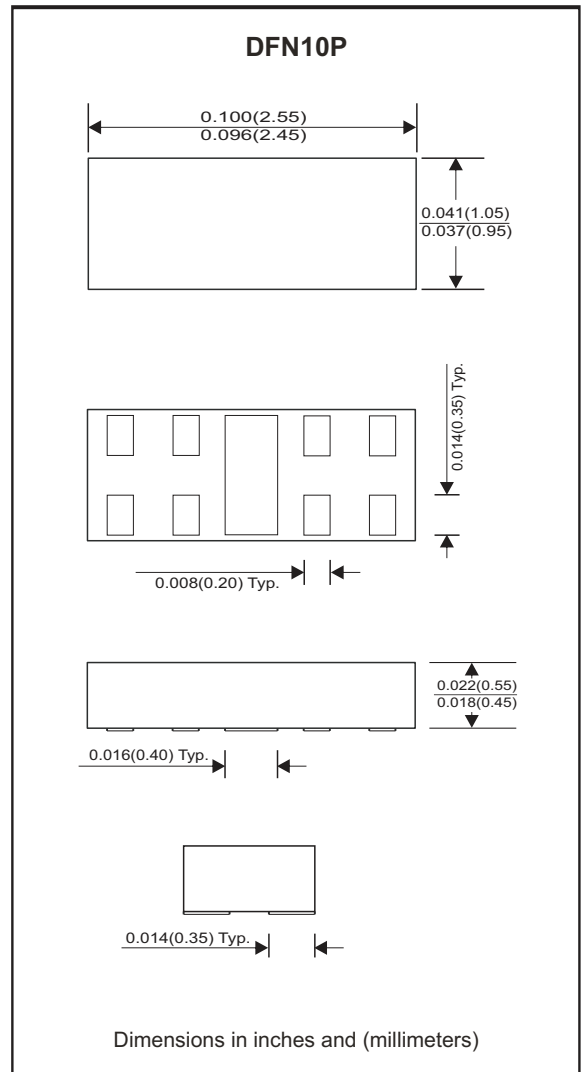
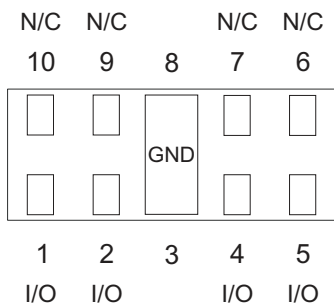
### Mechanical data

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

### Circuit Diagram



### Package



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

Parameter	Symbol	Value	Unit
Peak pulse power ( tp = 8/20 us)	PPP	60	W
Peak pulse current ( tp = 8/20 us)	I <sub>PP</sub>	3	A
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	ESD	±15 ±14	kV
Operating temperature	T <sub>J</sub>	-55 to +125	°C
Storage temperature	T <sub>STG</sub>	-55 to +150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-off voltage		V <sub>RWM</sub>			5.0	V
Breakdown voltage	I <sub>R</sub> = 1mA	V <sub>BR</sub>	6.0			V
Leakage current	V <sub>R</sub> = 5.0V	I <sub>L</sub>			50	nA
Clamping voltage	I <sub>PP</sub> = ±1A, T <sub>p</sub> = 8/20us Any Channel Pin to Ground	V <sub>C</sub>		12		V
Junction capacitance	V <sub>R</sub> = 0 V, f = 1MHz Any Channel Pin to Ground	C <sub>j</sub>		0.15	0.25	pF

## RATING AND CHARACTERISTIC CURVES (CPDA10R5V0SP-HF)

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

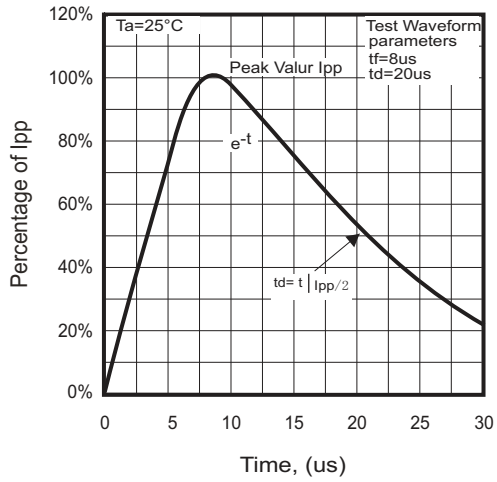


Fig.2 - Typical Capacitance Between Terminals Characteristics

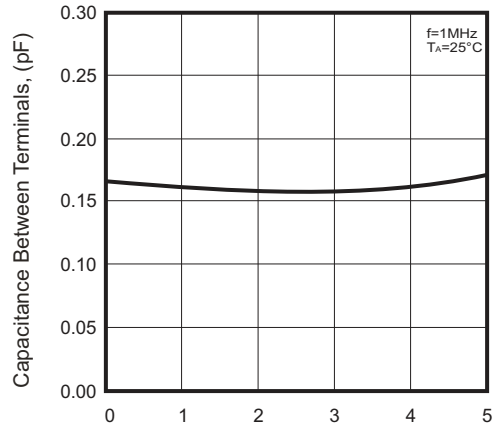


Fig.3 - Typical Clamping Voltage Vs. Peak Pulse Current

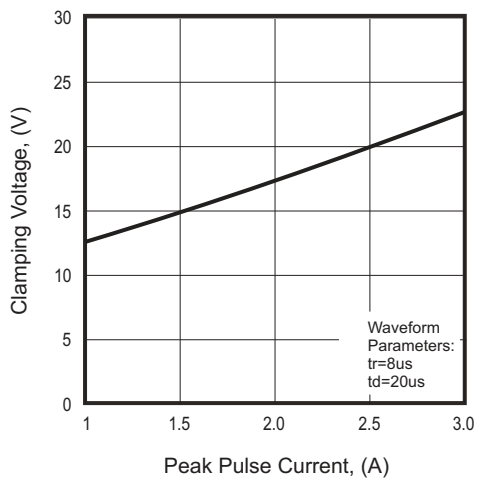
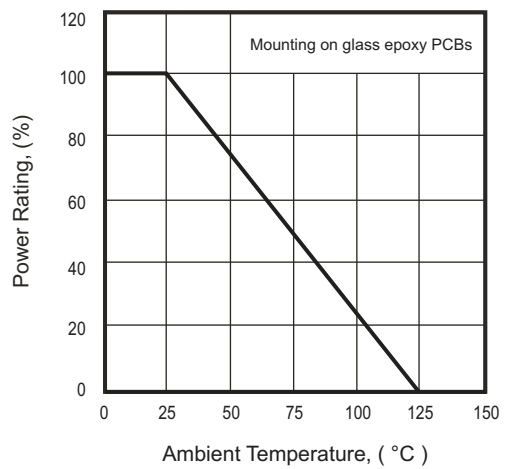
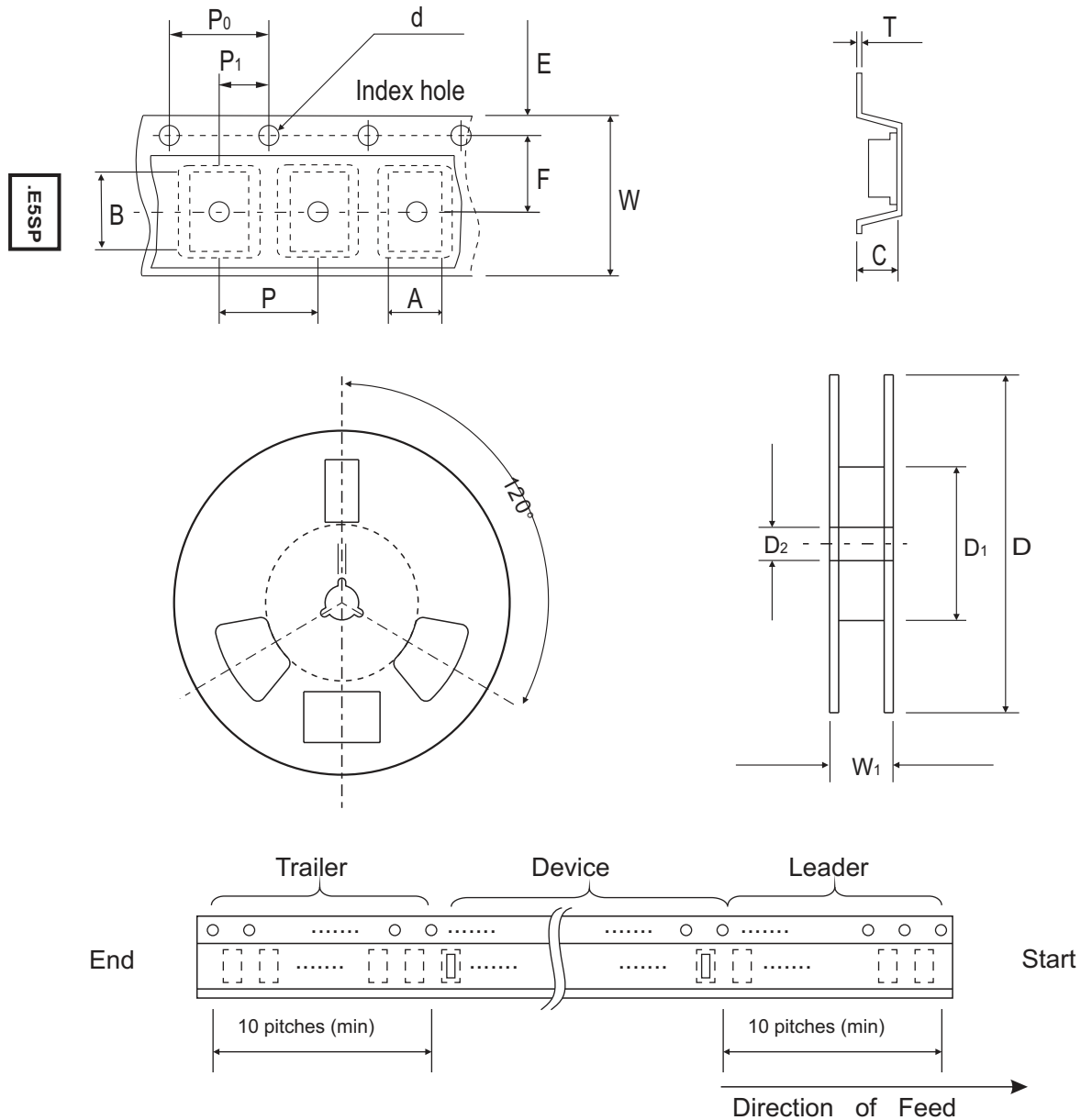


Fig.4 - Power Rating Derating Curve



## 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 ± 1	60.0 + 0.50 - 0	13.0 ± 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	12.0 ± 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

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

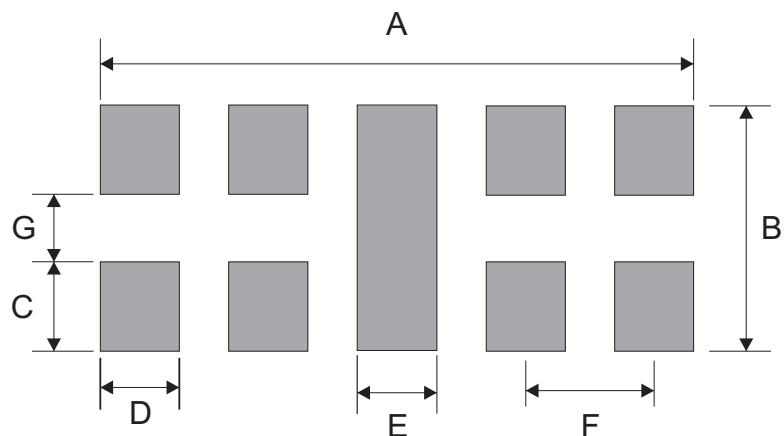
## Marking Code

Part Number	Marking Code
CPDA10R5V0SP-HF	.E5SP



## 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