

CPDA10R5V0U-HF

RoHS Device

Halogen Free



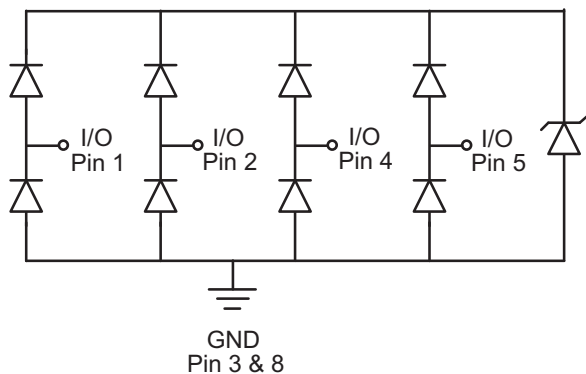
Features

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

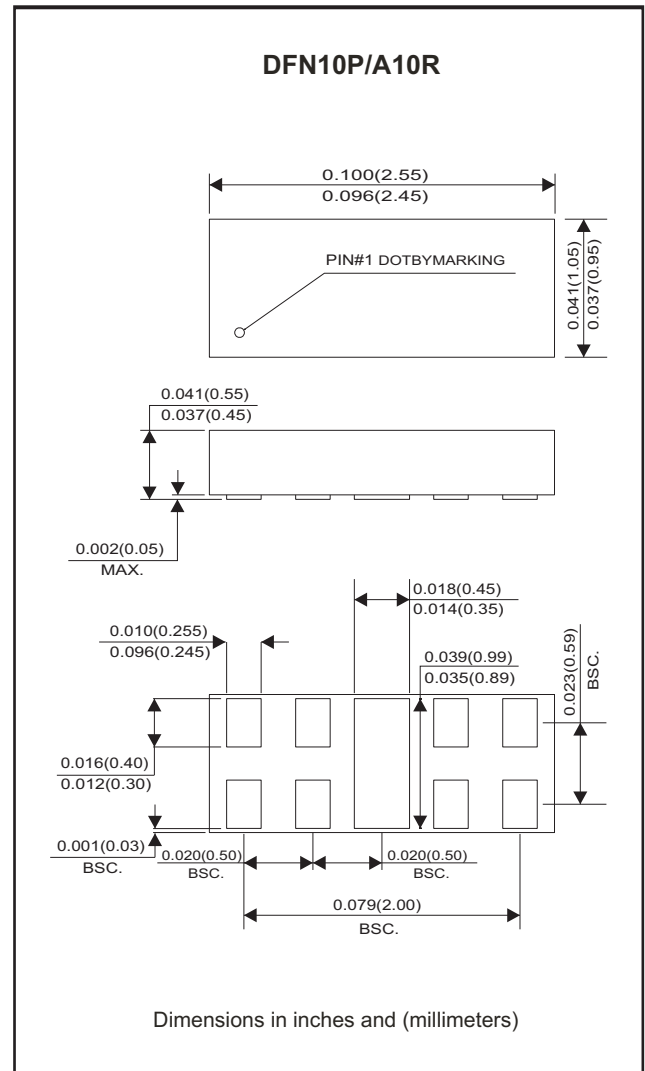
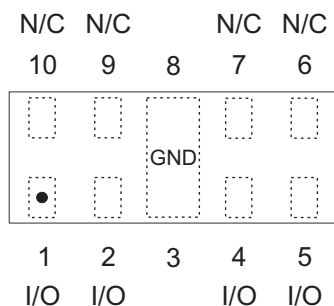
Mechanical data

- 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°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power (t _p = 8/20us)	P _{PP}	90	W
Peak pulse current (t _p = 8/20us)	I _{PP}	5	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	ESD	±15	kV
Operating temperature range	T _J	-55 to +125	°C
Storage temperature range	T _{STG}	-55 to +150	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-off voltage		V _{RWM}			5	V
Forward voltage	I _F = 10 mA	V _F			1.2	V
Breakdown voltage	I _T = 1 mA	V _{BR}	6			V
Leakage current	V _{RWM} = 5V	I _R			0.1	uA
Clamping voltage	I _{PP} = 1A, T _P = 8/20us, I/O Pin to GND	V _C		9	12	V
	I _{PP} = 5A, T _P = 8/20us, I/O Pin to GND	V _C		15	18	V
Junction capacitance	V _R = 0V, f = 1MHz I/O Pin to GND	C _j		0.5	0.7	pF

RATING AND CHARACTERISTIC CURVES (CPDA10R5V0U-HF)

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

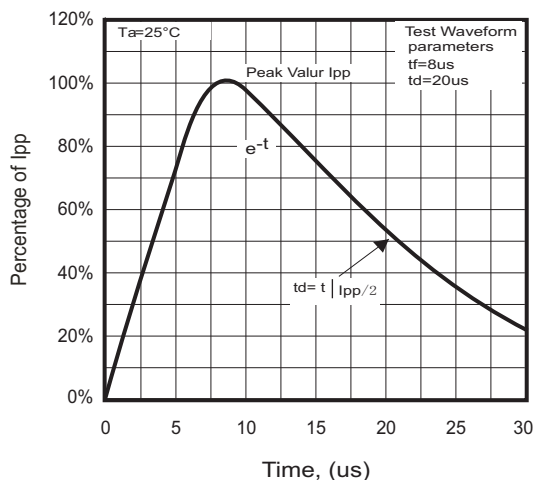


Fig.2 - Forward Characteristics

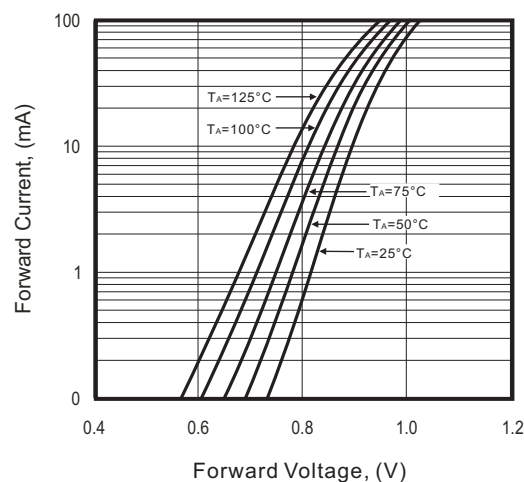


Fig.3 - Typical Clamping Voltage Vs.
Peak Pulse Current

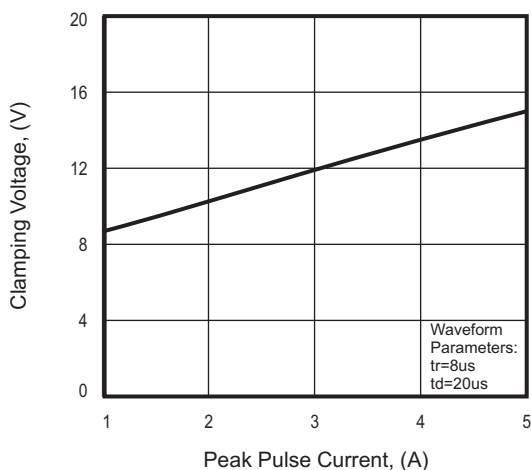


Fig.4 - Power Rating Derating Curve

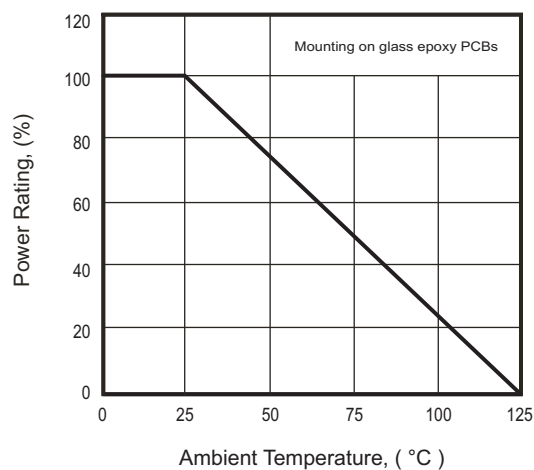
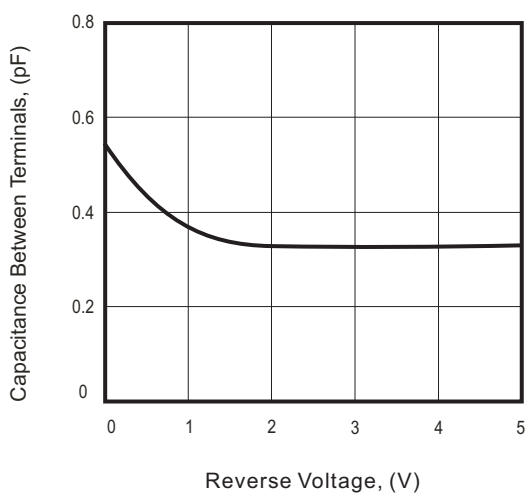
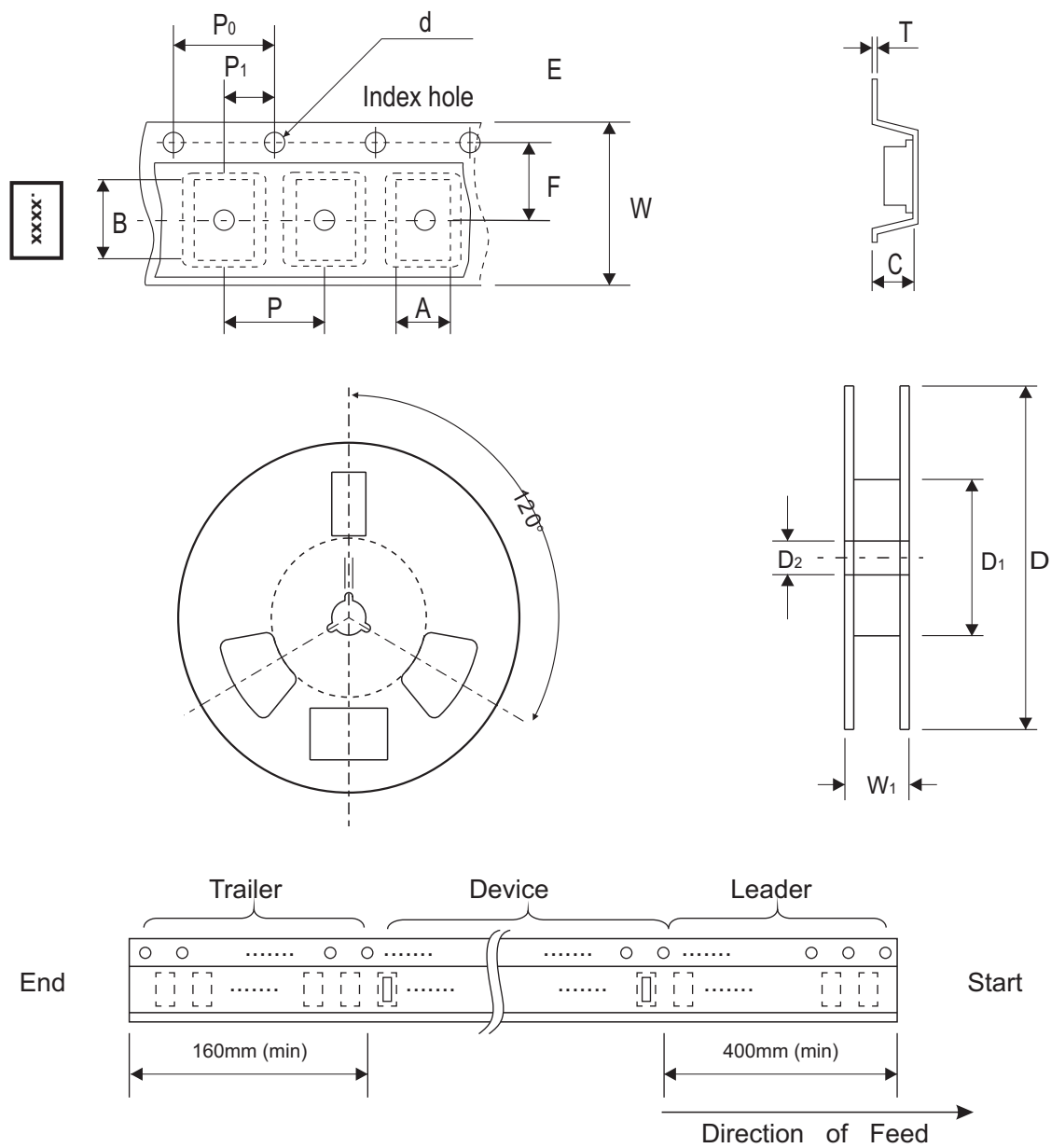


Fig.5 - Typical Capacitance Between
Terminals Characteristics



Reel Taping Specification



DFN10P	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(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 ₀	P ₁	T	W	W ₁
	(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

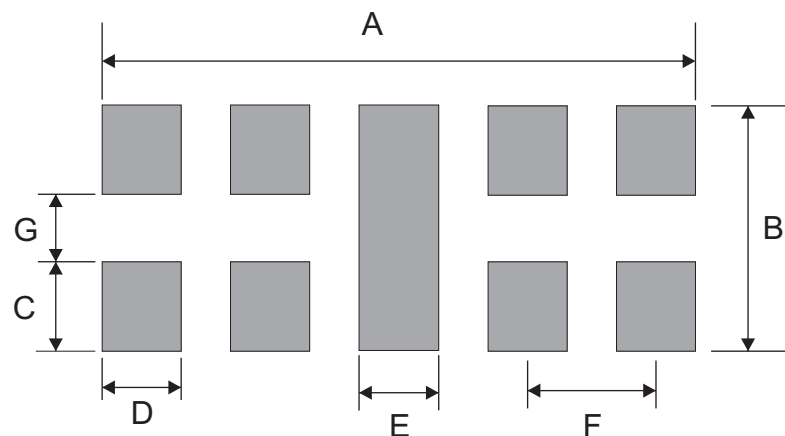
Marking Code

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Comchip Technology:](#)

[CPDA10R5V0U-HF](#)