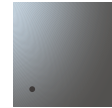


CPDA3-5VUA-HF

RoHS Device
Halogen Free



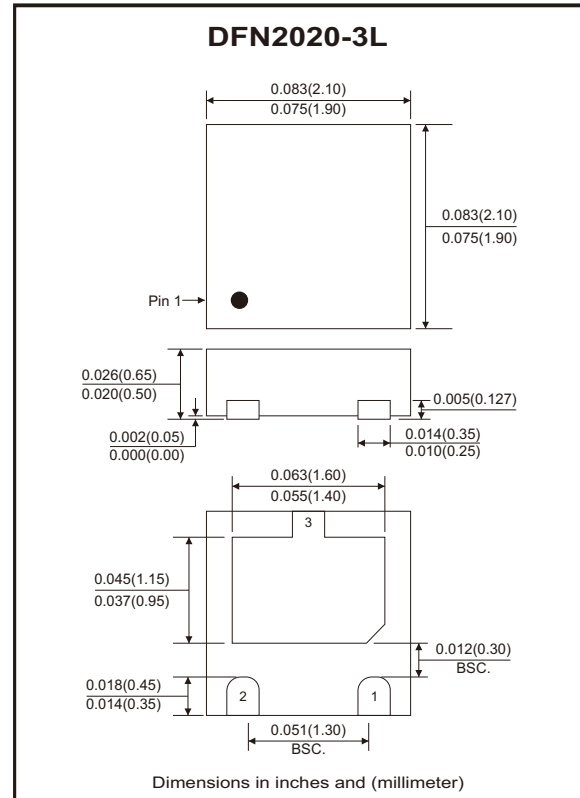
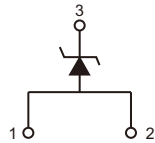
Features

- 3-Pin lead-less package.
- Low clamping voltage.
- Low leakage current.
- Working voltage: 5V.
- IEC 61000-4-2 (ESD) ± 30 kV (air/contact)

Mechanical data

- Case: DFN2020-3L package, molded plastic.
- Terminals: Matte tin plated, solderable per MIL-STD-750, method 2026.
- Mounting position: Any.

Circuit Diagram



Maximum Rating (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Value	Unit
Peak pulse power	$T_P = 8/20\mu\text{s}$	P_{PP}	5880	W
Peak pulse current	$T_P = 8/20\mu\text{s}$	I_{PP}	280	A
ESD capability	IEC 61000-4-2(air) IEC 61000-4-2(contact)	ESD	± 30	kV
Operating junction temperature range		T_J	-55 to +125	$^\circ\text{C}$
Storage temperature range		T_{STG}	-55 to +150	$^\circ\text{C}$

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse working voltage		V_{RWM}			5	V
Reverse breakdown voltage	$I_R = 1\text{mA}$	V_{BR}	6		9	V
Reverse leakage current	$V_R = 5\text{V}$	I_R			2	μA
Clamping voltage	$I_{PP} = 100\text{A}$, $T_P = 8/20\mu\text{s}$	V_C			13	V
	$I_{PP} = 200\text{A}$, $T_P = 8/20\mu\text{s}$	V_C			17	
	$I_{PP} = 280\text{A}$, $T_P = 8/20\mu\text{s}$	V_C			21	
Junction capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_J		3000		pF

Typical Rating and Characteristic Curves (CPDA3-5VUA-HF)

Fig.1 - Power Rating Derating Curve

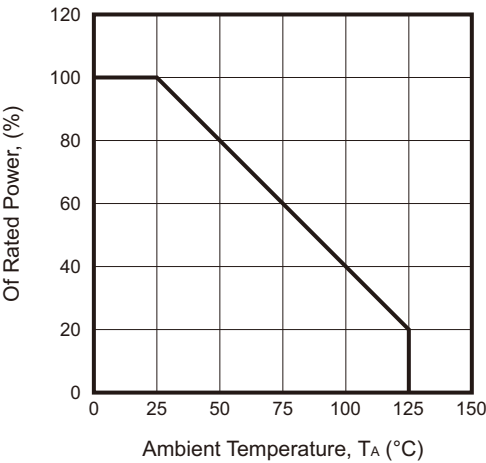


Fig.2 - Pulse Waveform

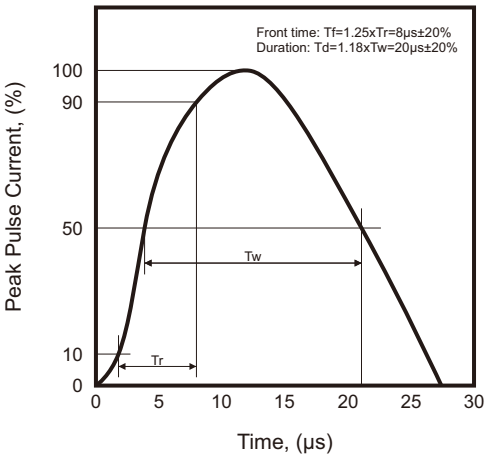


Fig.3 - Capacitance Between Terminals Characteristics

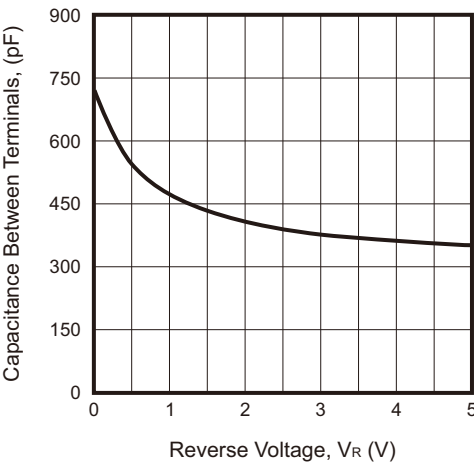
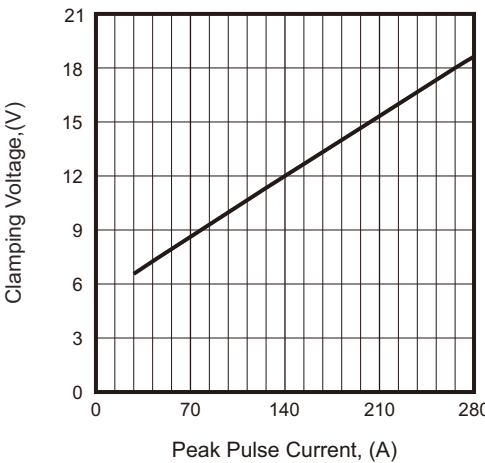
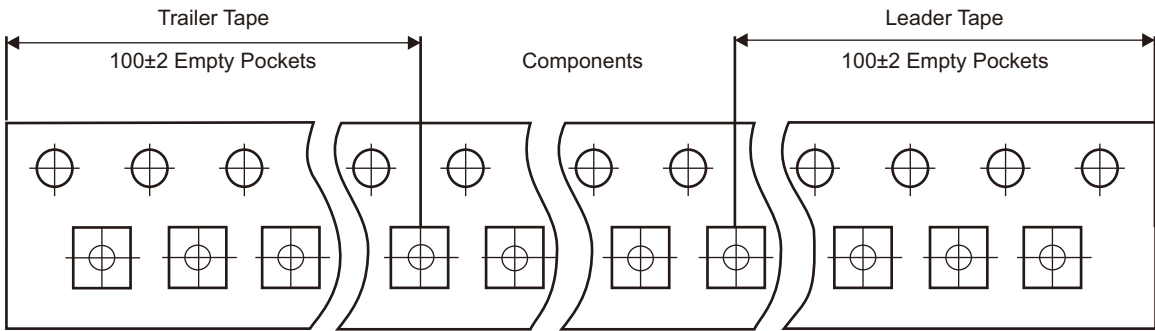
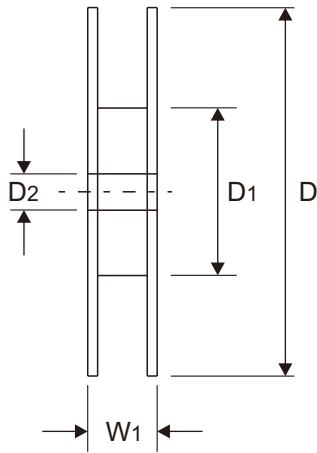
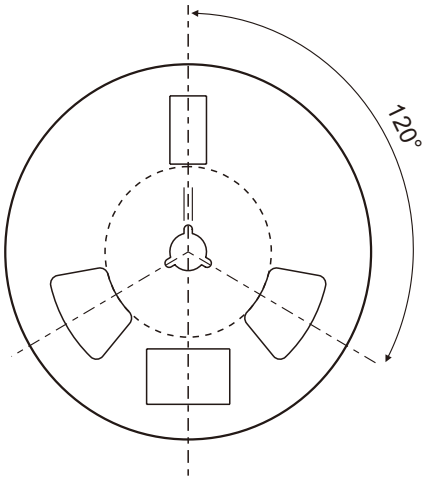
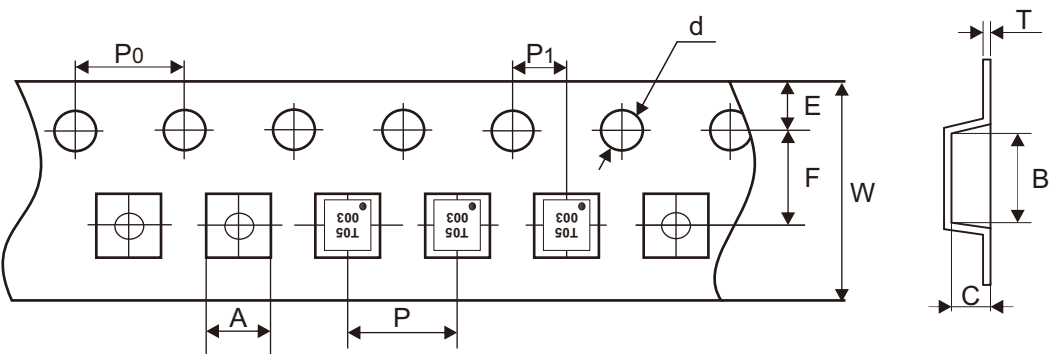


Fig.4 - Clamping Voltage vs. Peak Pulse Current



Reel Taping Specification

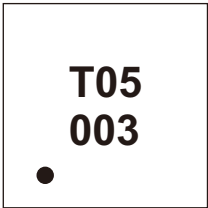


DFN2020 -3L	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.20 ± 0.10	2.18 ± 0.05	0.60 ± 0.10	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.087 ± 0.004	0.086 ± 0.002	0.024 ± 0.004	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

DFN2020 -3L	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.03	8.00 ± 0.20	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.001	0.315 ± 0.008	0.484 ± 0.039

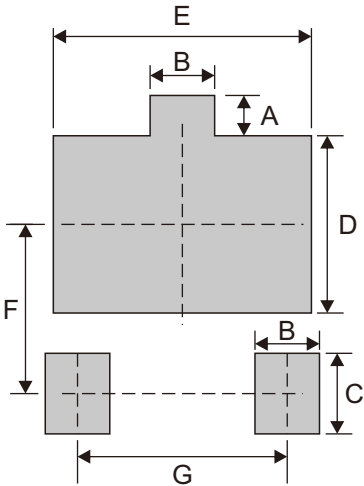
Marking Code

Part Number	Marking Code
CPDA3-15VU-HF	T05003



Suggested P.C.B. PAD Layout

SIZE	DFN2020-3L	
	(mm)	(inch)
A	0.25	0.010
B	0.40	0.016
C	0.50	0.020
D	1.10	0.043
E	1.60	0.063
F	1.10	0.043
G	1.30	0.051



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DFN2020-3L	3,000	7