

## CPDZD3V3HE-HF

RoHS Device  
Halogen Free



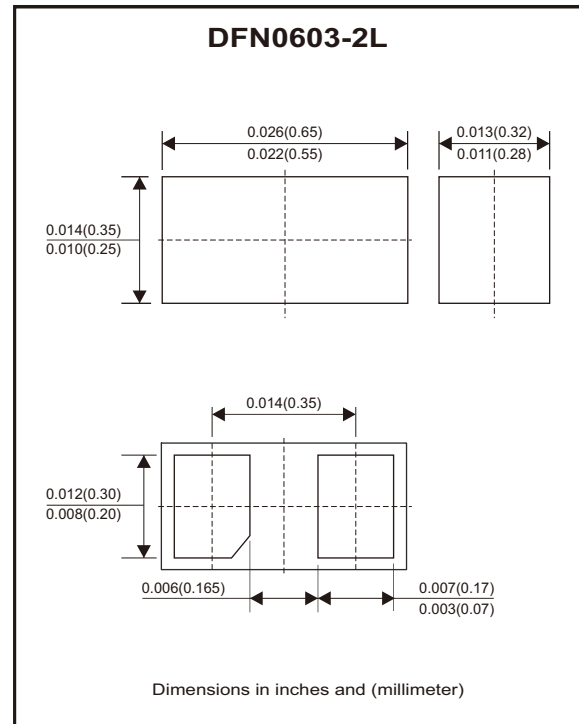
### Features

- Low junction capacitance.
- Working voltage: 3.3V.
- Low clamping voltage.

### Mechanical data

- Case: DFN0603-2L package, molded plastic.
- Lead finish: Matte tin.
- Mounting position: Any.

### Circuit Diagram



### Maximum Rating (at TA=25°C, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power (tp=8/20µs waveform)	P <sub>PPP</sub>	80	W
Peak pulse current (8/20µs)	I <sub>PP</sub>	8	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V <sub>ESD</sub>	±30	kV
Operation temperature range	T <sub>J</sub>	-55 to +125	°C
Storage temperature range	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 working voltage		V <sub>RWM</sub>			3.3	V
Breakdown voltage	I <sub>T</sub> = 1mA	V <sub>BR</sub>	3.8			V
Reverse leakage current	V <sub>RWM</sub> = 3.3V	I <sub>R</sub>		0.01	0.2	µA
Clamping voltage	I <sub>PP</sub> = 1A (8x20µs pulse) I <sub>PP</sub> = 5A (8x20µs pulse) I <sub>PP</sub> = 8A (8x20µs pulse)	V <sub>C</sub>			6 8 10	V
Junction capacitance	V <sub>R</sub> = 0V, f = 1MHz	C <sub>J</sub>		10	25	pF

## Rating and Characteristic Curves (CPDZD3V3HE-HF)

Fig.1 - Junction Capacitance vs. Reverse Voltage

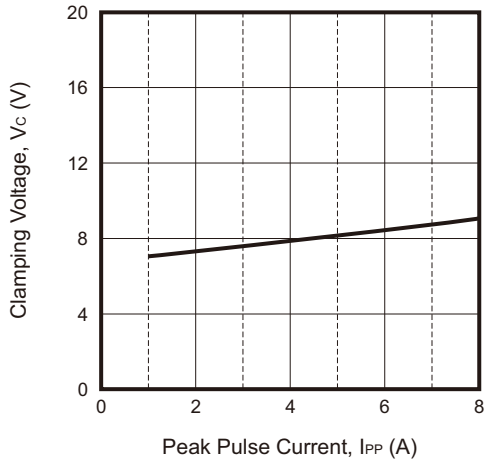


Fig.2 - Peak Pulse Power vs. Pulse Time

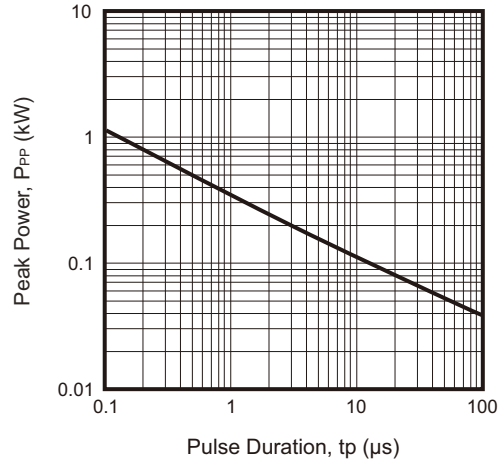


Fig.3 - Clamping Voltage vs. Peak Pulse Current

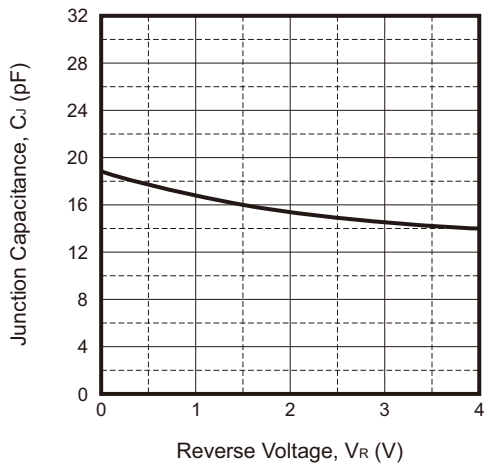


Fig.4 - Power Derating Curve

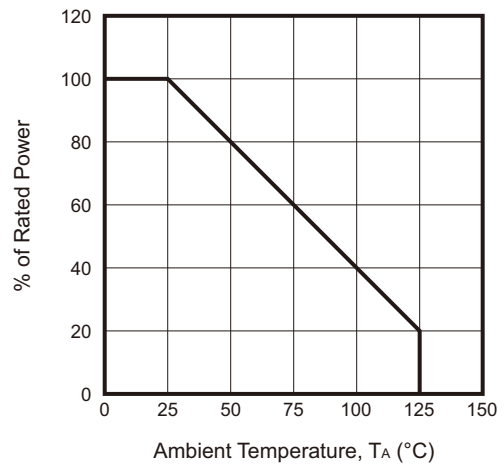
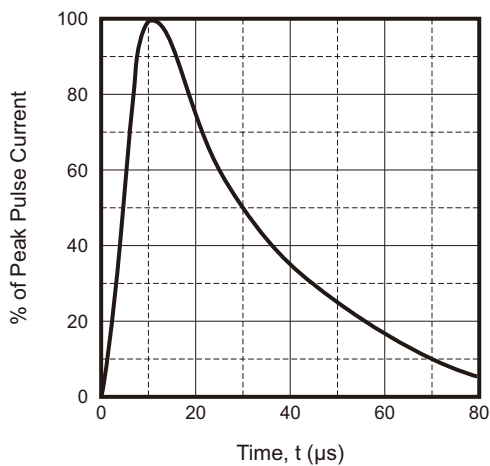
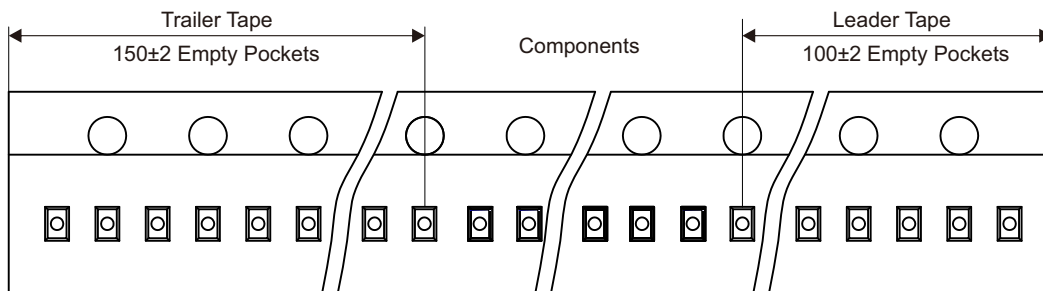
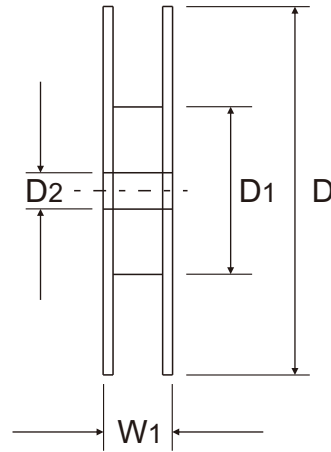
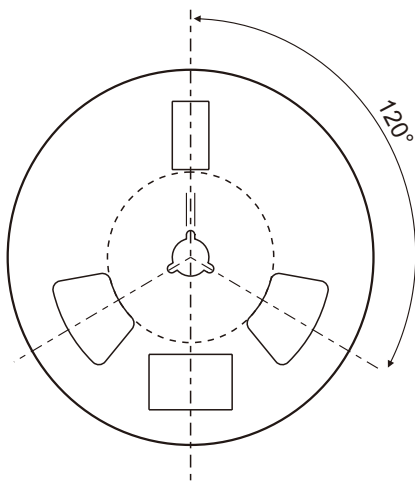
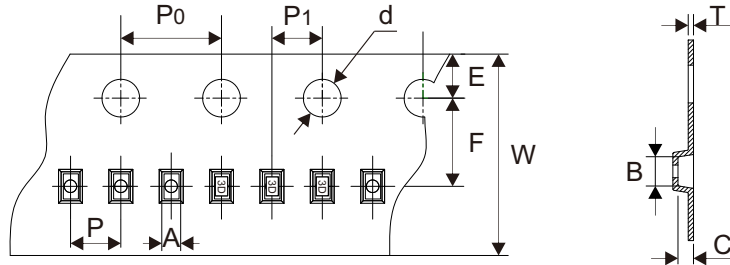


Fig.5 - 8x20μs Pulse Waveform



## Reel Taping Specification

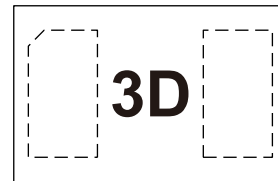


DFN0603-2L	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.35 ± 0.05	0.65 ± 0.05	0.60 ± 0.10	2.00 ± 0.10	178 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.014 ± 0.002	0.026 ± 0.002	0.024 ± 0.004	0.079 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

DFN0603-2L	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.10	0.25 ± 0.10	8.00 ± 0.30	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.004	0.010 ± 0.004	0.315 ± 0.012	0.484 ± 0.039

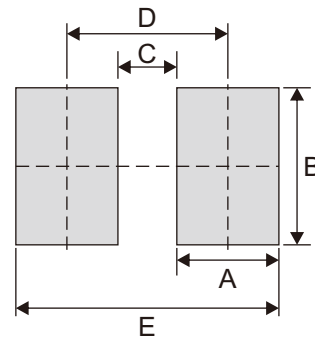
## Marking Code

Part Number	Marking Code
CPDZD3V3HE-HF	3D



## Suggested P.C.B. PAD Layout

SIZE	DFN0603-2L	
	(mm)	(inch)
A	0.26	0.010
B	0.40	0.016
C	0.15	0.006
D	0.41	0.016
E	0.67	0.026



## Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DFN0603-2L	15,000	7