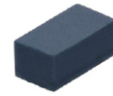


CPDZD5V0HE-HF

RoHS Device
Halogen Free



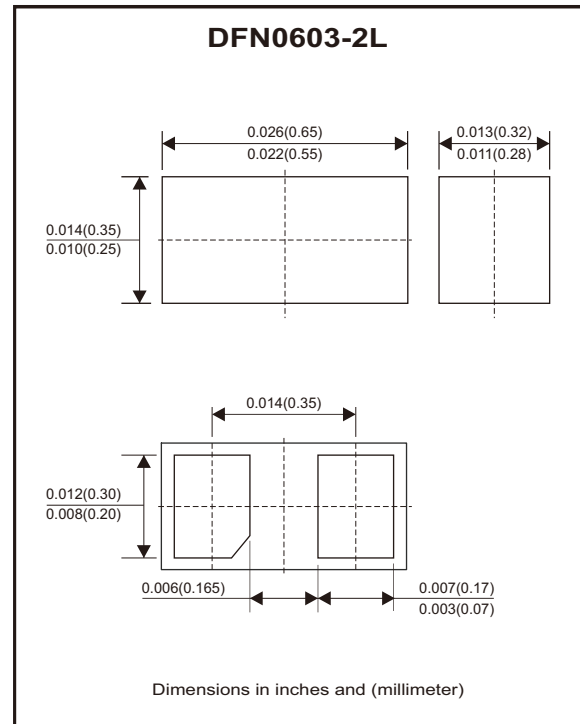
Features

- Low junction capacitance (typical value: 13pF).
- Working voltage: 5V.
- Low clamping voltage.

Mechanical data

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

Circuit Diagram



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

Parameter	Symbol	Value	Unit
Peak pulse power (tp=8/20μs waveform)	P_{PP}	100	W
Peak pulse current (8/20μs)	I_{PP}	8	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating 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
Breakdown voltage	$I_T = 1\text{mA}$	V_{BR}	5.6			V
Reverse leakage current	$V_{RWM} = 5\text{V}$	I_R			0.5	μA
Clamping voltage	$I_{PP} = 1\text{A}$ (8x20μs pulse)	V_C			7.5	V
	$I_{PP} = 8\text{A}$ (8x20μs pulse)	V_C			12.5	
Junction capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_J		13	22	pF

Typical Rating and Characteristic Curves (CPDZD5V0HE-HF)

Fig.1 - Power Rating Derating Curve

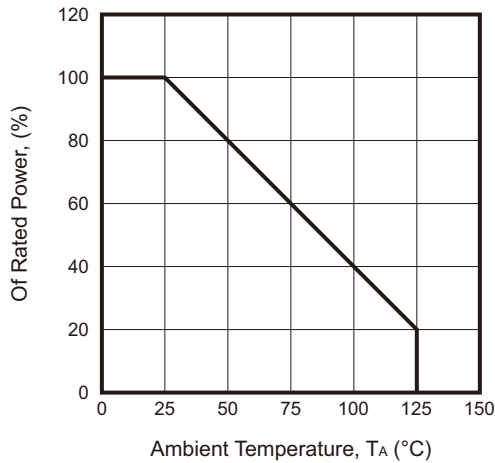


Fig.2 - Pulse Waveform

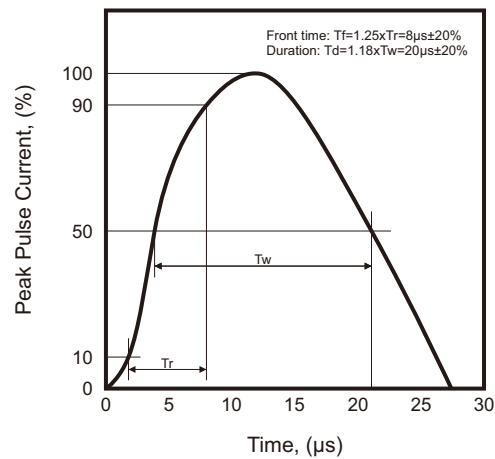


Fig.3 - Capacitance Between Terminals Characteristics

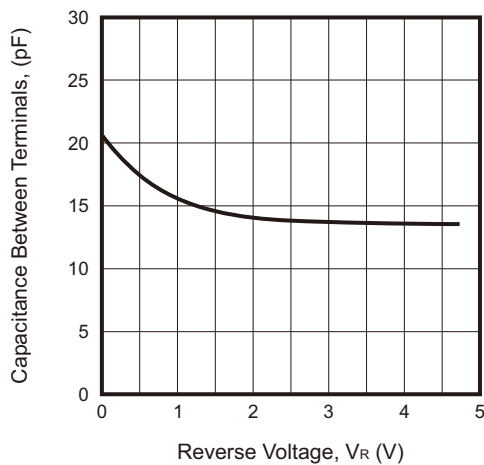
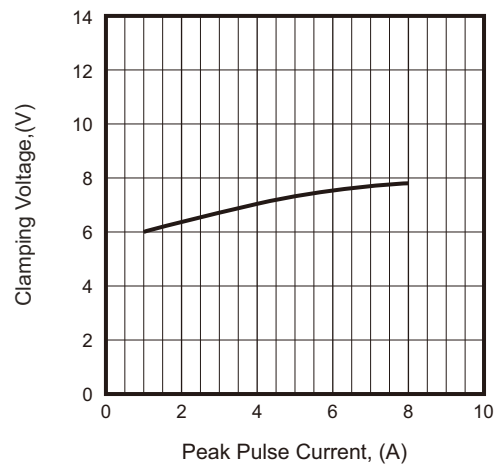
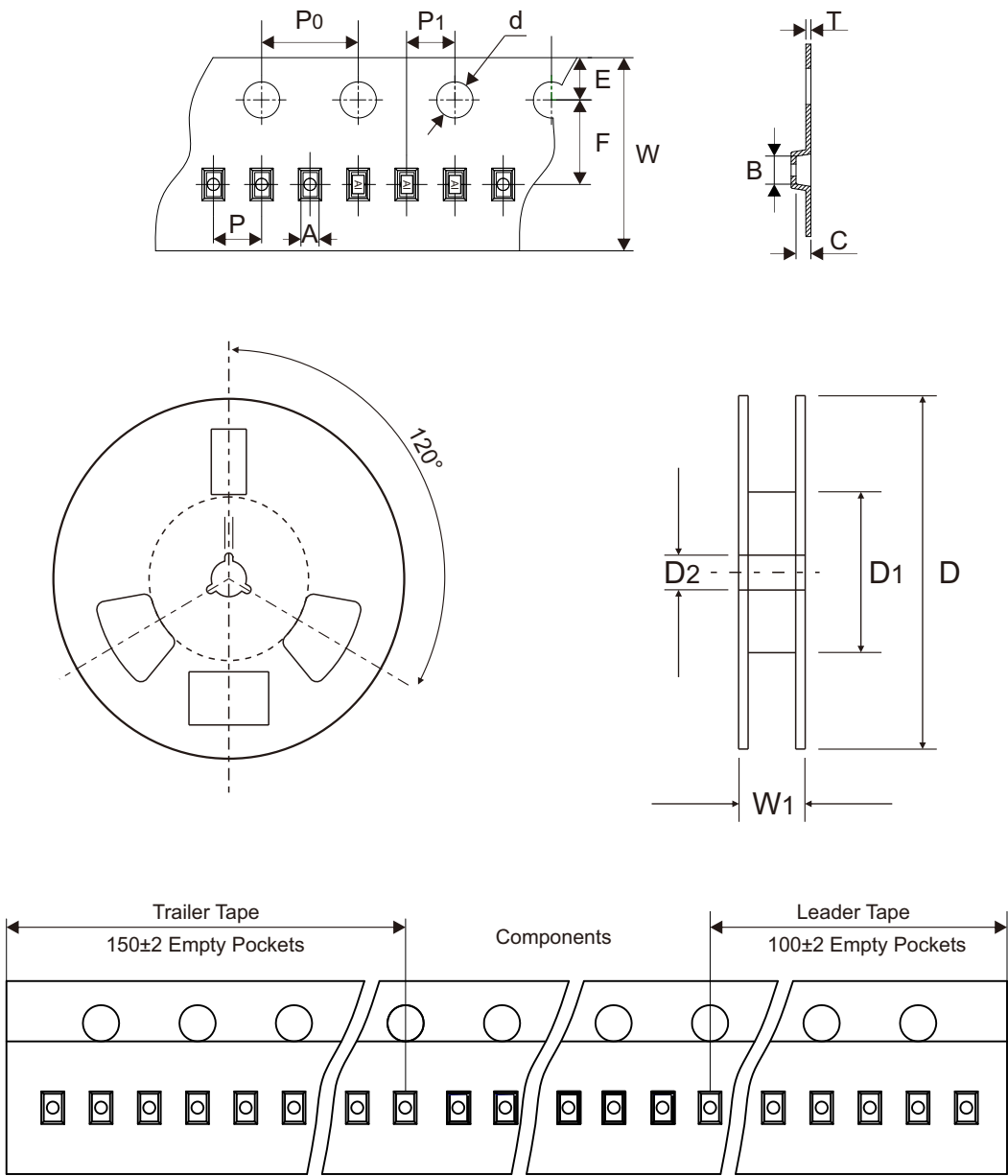


Fig.4 - Clamping Voltage vs. Peak Pulse Current



Reel Taping Specification

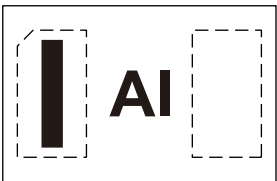


DFN0603-2L	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.35 ± 0.05	0.65 ± 0.05	0.60 ± 0.10	2.00 ± 0.10	178 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.014 ± 0.002	0.026 ± 0.002	0.024 ± 0.004	0.079 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

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

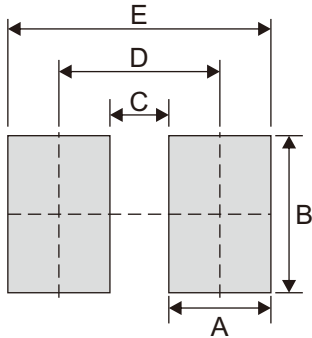
Marking Code

Part Number	Marking Code
CPDZD5V0HE-HF	AI



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

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