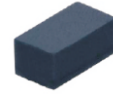


CPDZD7V0HE-HF

RoHS Device
Halogen Free



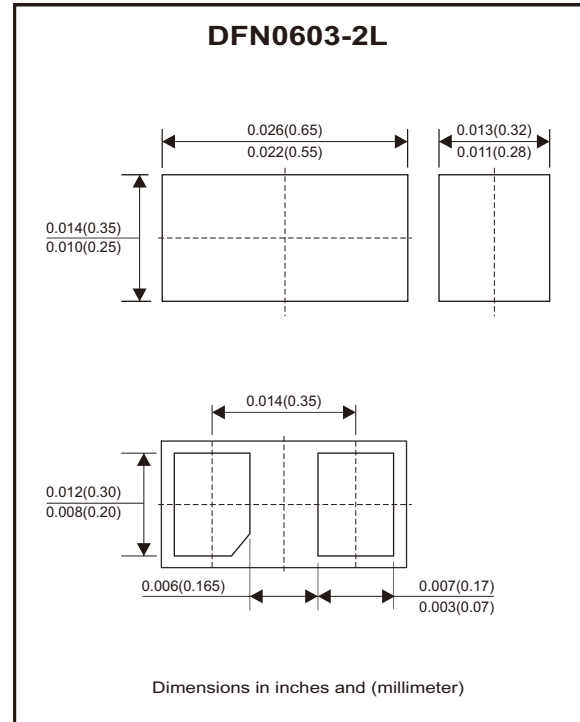
Features

- Low capacitance (typical value: 15pF).
- Working voltage: 7V.
- 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=8/20 μs waveform)	P_{PPP}	80	W
Peak pulse current (8/20 μs)	I_{PP}	5	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	± 25	kV
ESD per IEC 61000-4-2 (Contact)		± 20	
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}			7	V
Breakdown voltage	$I_T = 1\text{mA}$	V_{BR}	7.5			V
Reverse leakage current	$V_{RWM} = 7\text{V}$	I_R			0.2	μA
Clamping voltage	$I_{PP} = 1\text{A}$ (8x20 μs pulse)	V_C			9	V
	$I_{PP} = 5\text{A}$ (8x20 μs pulse)	V_C			16	
Junction capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_J		15		pF

Typical Rating and Characteristic Curves (CPDZD7V0HE-HF)

Fig.1 - Junction Capacitance vs. Reverse Voltage

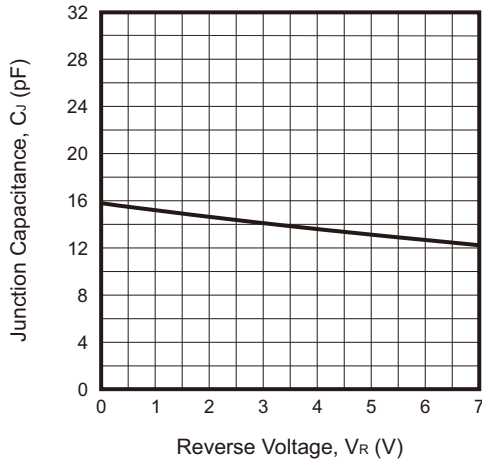


Fig.2 - Peak Pulse Power vs. Pulse Time

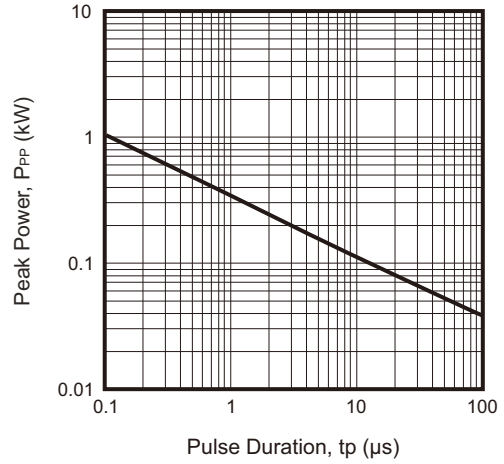


Fig.3 - Clamping Voltage vs. Peak Pulse Current

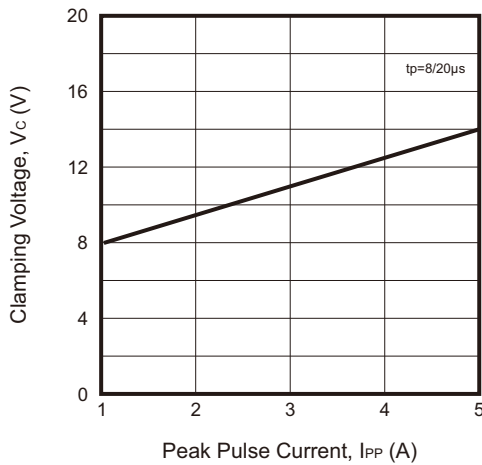


Fig.4 - Power Derating Curve

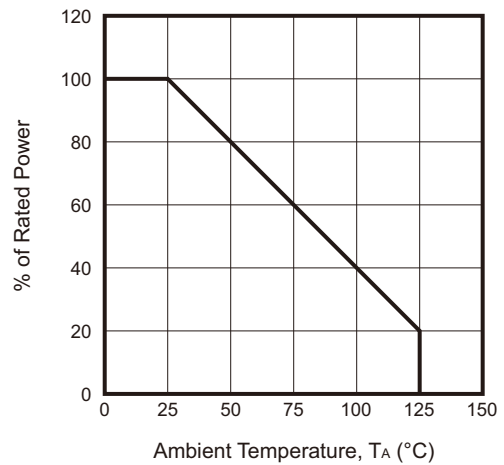
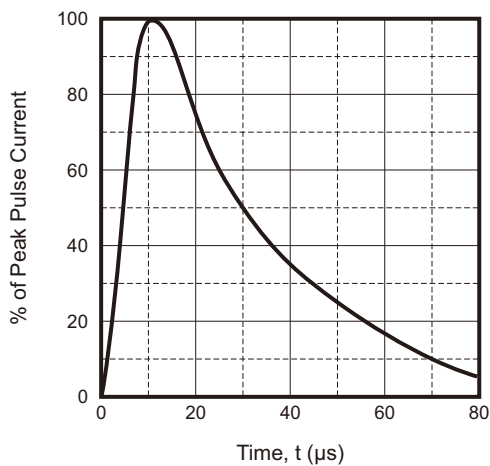
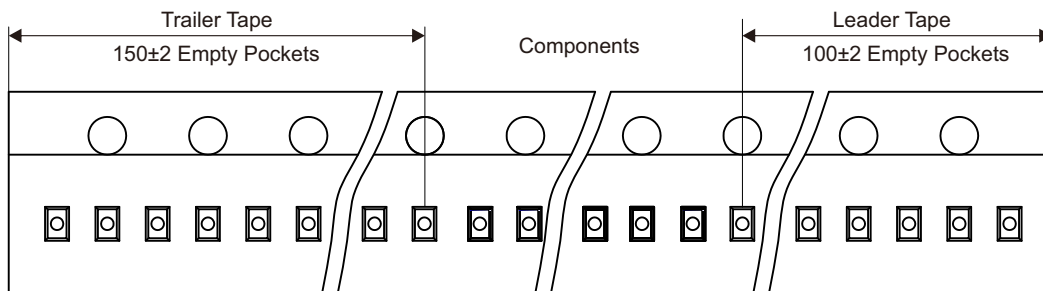
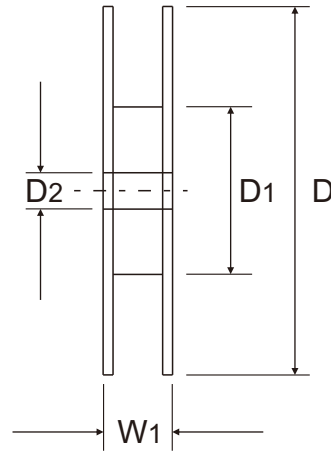
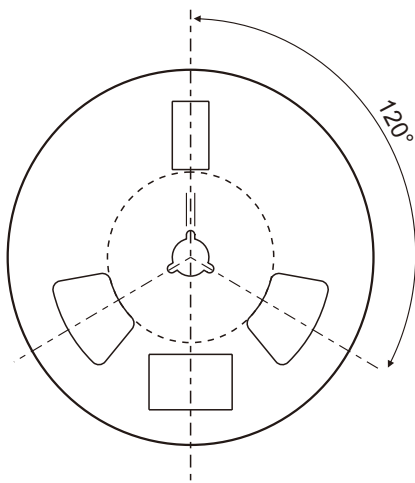
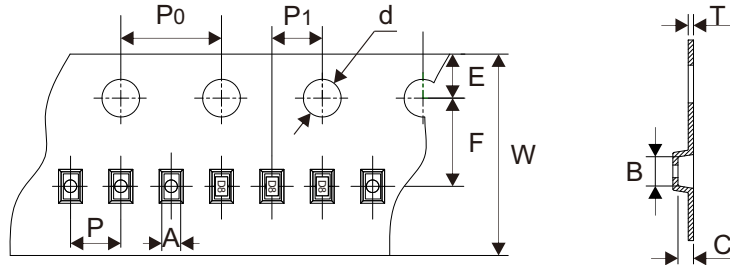


Fig.5 - 8x20 μ s Pulse Waveform



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

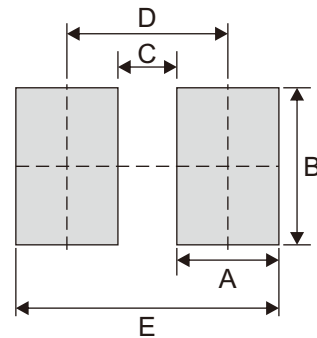
Marking Code

Part Number	Marking Code
CPDZD7V0HE-HF	D8



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