

CPDZD5V0B-E5-HF

RoHS Device
Halogen Free



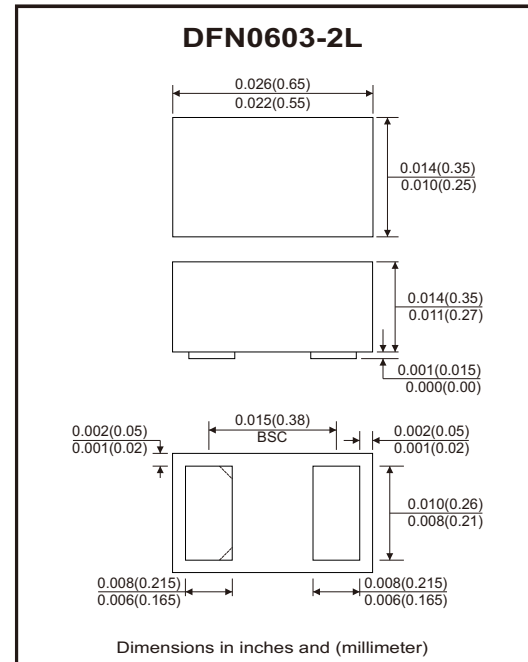
Features

- IEC 61000-4-2 (ESD) $\pm 20\text{kV}$ (air/contact).
- Protecting one Bi-directional lines.
- Low clamping voltage.
- Low leakage current.

Mechanical data

- Case: DFN0603-2L package, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Mounting position: Any.

Circuit Diagram



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

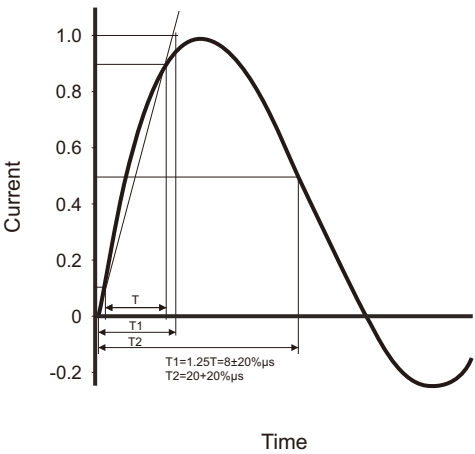
Parameter	Conditions	Symbol	Value	Unit
Peak pulse power	$T_P = 8/20\mu\text{s}$	P_{PP}	122	W
Peak pulse current	$T_P = 8/20\mu\text{s}$	I_{PP}	4.5	A
ESD capability	IEC 61000-4-2(air) IEC 61000-4-2(contact)	ESD	± 20	kV
Lead temperature		T_L	260	$^\circ\text{C}$
Junction temperature		T_J	150	$^\circ\text{C}$
Storage temperature range		T_{STG}	-55 to +150	$^\circ\text{C}$

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

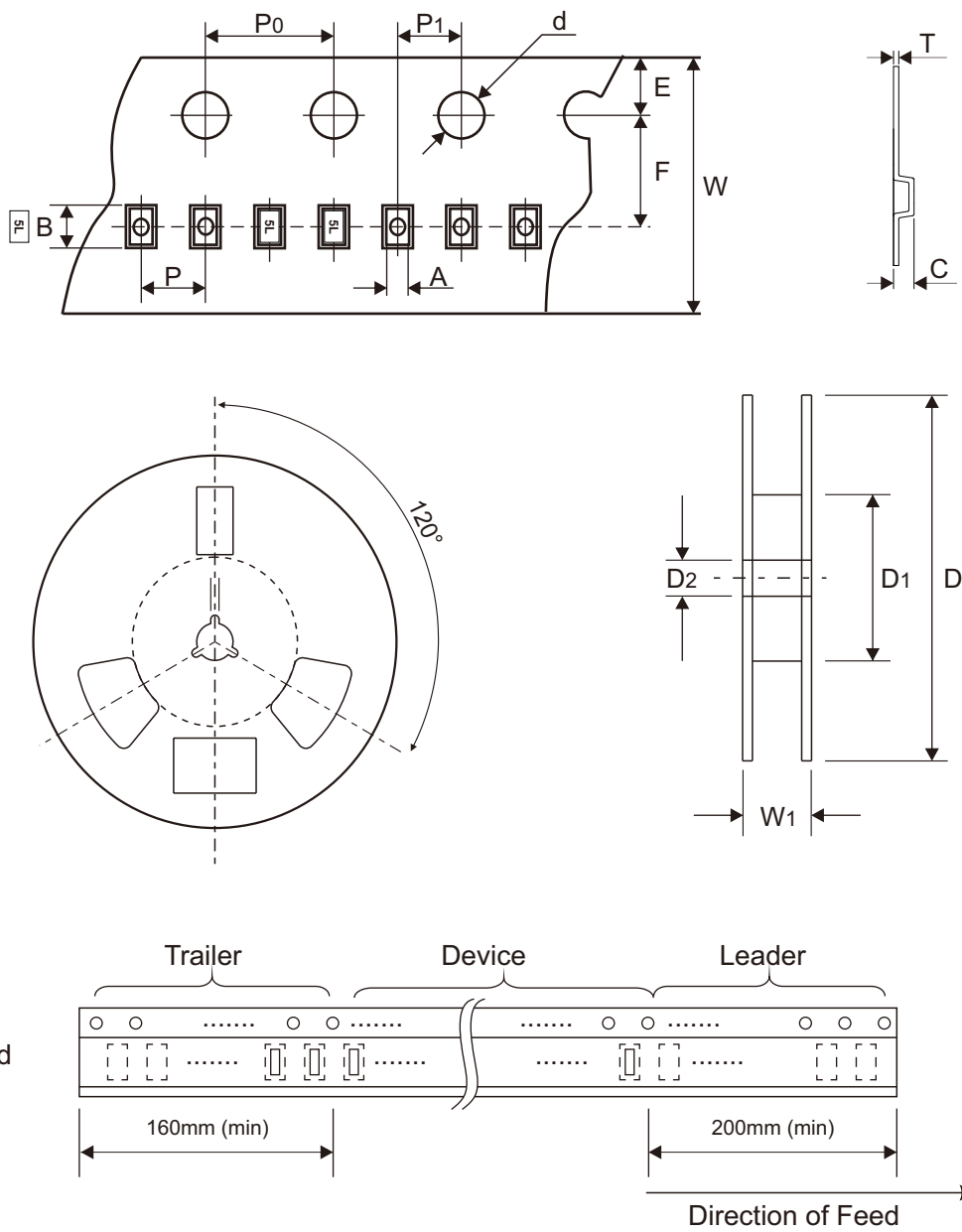
Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-off voltage		V_{RWM}			5	V
Breakdown voltage	$I_T = 1\text{mA}$	V_{BR}	6.5			V
Reverse leakage current	$V_{RWM} = 5\text{V}$	I_R			1	μA
Clamping voltage	$I_{PP} = 1\text{A}$, $T_P = 8/20\mu\text{s}$	V_C		12		V
	$I_{PP} = 4.5\text{A}$, $T_P = 8/20\mu\text{s}$	V_C		22	27	V
Junction capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_J		0.3		pF

Typical Rating and Characteristic Curves (CPDZD5V0B-E5-HF)

Fig.1 - 8/20μs Curve



Reel Taping Specification



DFN0603-2L	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.38 ± 0.03	0.68 ± 0.03	0.32 ± 0.05	1.55 ± 0.05	179.50 ± 0.25	54.70 ± 0.20	13.30 ± 0.15
	(inch)	0.015 ± 0.001	0.027 ± 0.001	0.013 ± 0.002	0.061 ± 0.002	7.067 ± 0.010	2.154 ± 0.008	0.524 ± 0.006

DFN0603-2L	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.18 ± 0.03	8.00 ± 0.10	11.50 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.007 ± 0.001	0.315 ± 0.004	0.453 ± 0.008

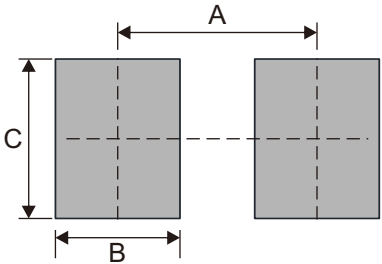
Marking Code

Part Number	Marking Code
CPDZD5V0B-E5-HF	5L



Suggested P.C.B. PAD Layout

SIZE	DFN0603-2L	
	(mm)	(inch)
A	0.40	0.016
B	0.25	0.010
C	0.32	0.013



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DFN0603-2L	10,000	7