

CPDQT5V0ESPC-HF

RoHS Device
Halogen Free



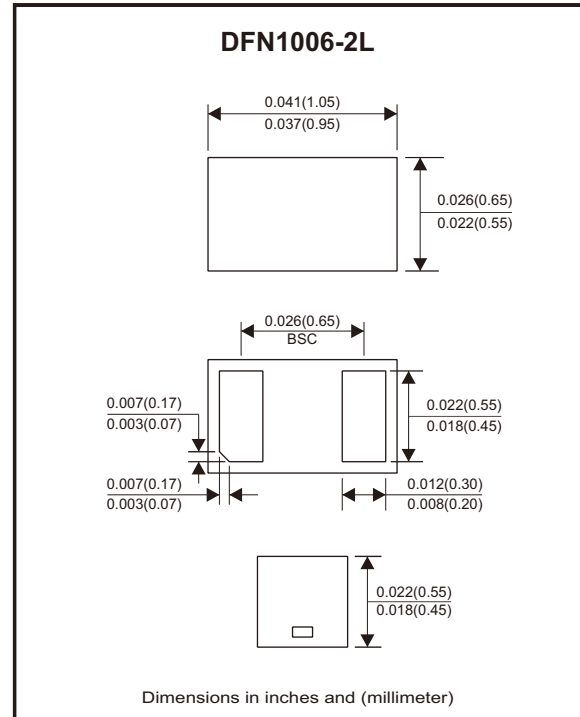
Features

- Low capacitance: 0.2pF (typ.).
- Reverse standoff voltage: 5V
- IEC 61000-4-2 (ESD air): ±24kV
IEC 61000-4-2 (ESD contact): ±22kV
IEC 61000-4-5 (Surge): 4A(8/20µs)

Mechanical data

- Case: DFN1006-2L standard package, molded plastic.
- Mounting position: Any.

Circuit Diagram



Maximum Rating (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Value	Unit
Electrostatic discharge voltage	IEC 61000-4-2(contact) IEC 61000-4-2(air)	V _{ESD}	±22 ±24	kV
Peak pulse power	T _P = 8/20µs	P _{PP}	85	W
Peak pulse current	IEC 61000-4-5, T _P = 8/20µs	I _{PP}	4	A
Operating junction temperature range		T _J	-40 to +125	°C
Storage temperature range		T _{STG}	-55 to +150	°C

Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse standoff voltage		V _{RWM}			5	V
Breakdown voltage	I _R = 1mA	V _{BR}	6.8		8	V
Reverse leakage current	V _{RWM} = 5V	I _R		10	100	nA
Surge clamping voltage (8/20µs)	I _{PP} = 1A	V _C		10.8		V
	I _{PP} = 4A	V _C		20		
Dynamic resistance	t _p = 10/100ns	R _{DYN}		0.92		Ω
Junction capacitance	V _R = 0V, f = 1MHz	C _J		0.2	0.28	pF

Typical Rating and Characteristic Curves (CPDQT5V0ESPC-HF)

Fig.1 - TLP Chart

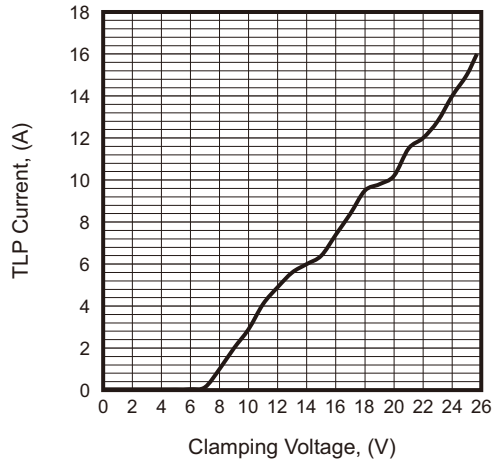


Fig.2 - Junction Capacitance

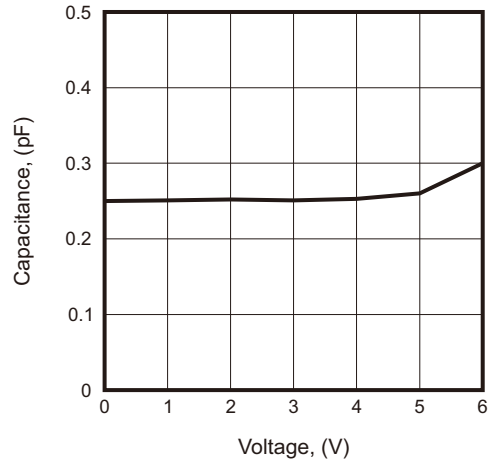
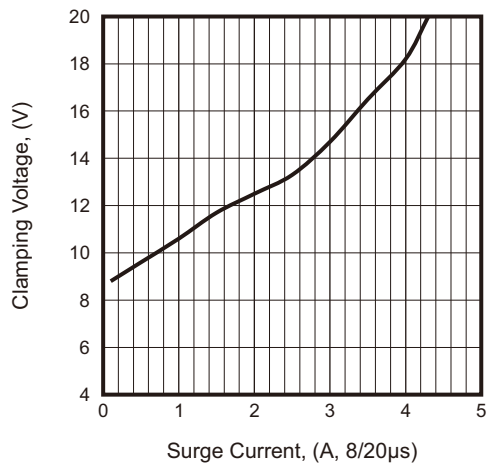
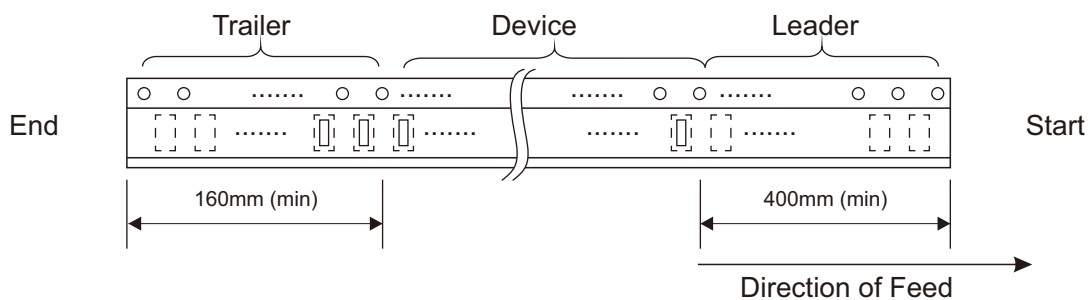
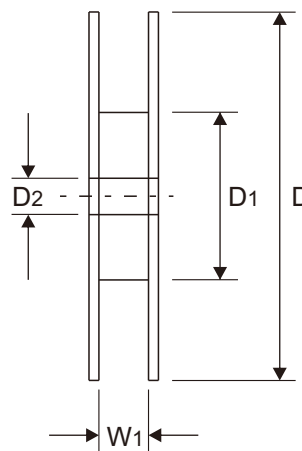
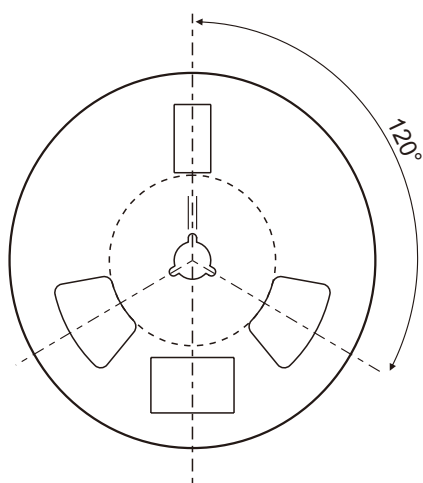
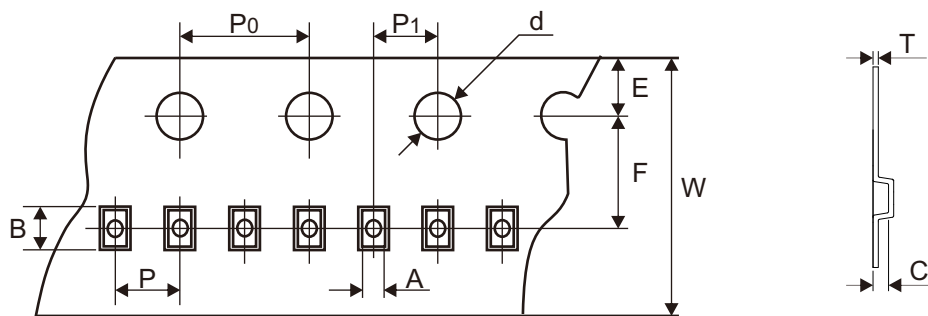


Fig.3 - Clamping Voltage vs Peak Pulse Current



Reel Taping Specification



DFN1006 -2L	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.69 ± 0.05	1.19 ± 0.05	0.66 ± 0.05	1.50 + 0.10	178.00 ± 1.00	54.50 ± 0.50	14.60 ± 0.20
	(inch)	0.027 ± 0.002	0.047 ± 0.002	0.026 ± 0.002	0.059 + 0.004	7.008 ± 0.039	2.146 ± 0.020	0.575 ± 0.008

DFN1006 -2L	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	0.20 ± 0.02	8.00 + 0.30 - 0.10	9.50 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.008 ± 0.001	0.315 + 0.012 - 0.004	0.374 ± 0.008

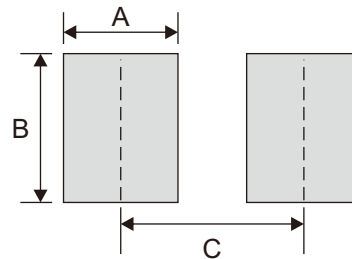
Marking Code

Part Number	Marking Code
CPDQT5V0ESPC-HF	St



Suggested P.C.B. PAD Layout

SIZE	DFN1006-2L	
	(mm)	(inch)
A	0.50	0.020
B	0.65	0.026
C	0.80	0.031



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DFN1006-2L	10,000	7