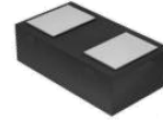


CPDQT3V3HE-HF

RoHS Device
Halogen Free



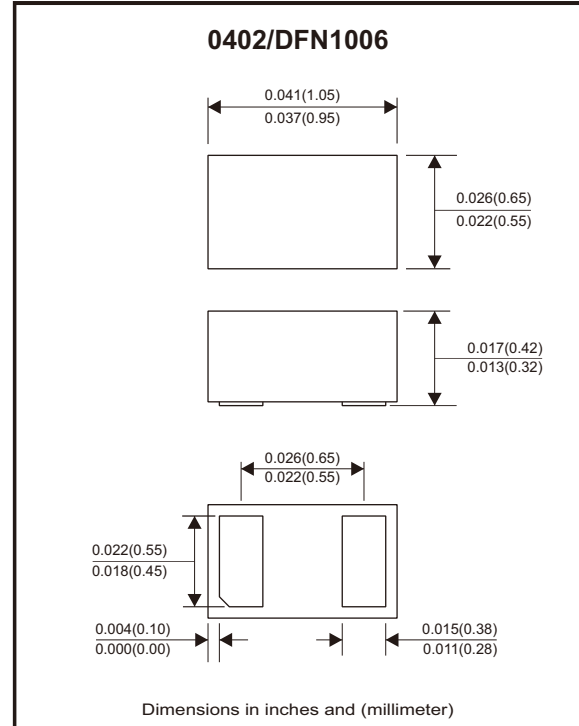
Features

- Low capacitance: 10pF (typ.).
- Reverse standoff voltage: 3.3V
- IEC 61000-4-2 (ESD air): ± 30 kV
IEC 61000-4-2 (ESD contact): ± 30 kV

Mechanical data

- Case: 0402/DFN1006 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}	± 30	kV
Peak pulse power	$T_P = 8/20\mu s$	P_{PP}	65	W
Peak pulse current	IEC 61000-4-5, $T_P = 8/20\mu s$	I_{PP}	8	A
Operating junction temperature range		T_J	-55 to +150	°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	I/O to GND	V_{RWM}			3.3	V
Breakdown voltage	$I_R = 1$ mA, I/O to GND	V_{BR}	5.0	5.5	6.5	V
Reverse leakage current	$V_{RWM} = 3.3$ V, I/O to GND	I_R			100	nA
Surge clamping voltage (8/20 μs)	$I_{PP} = 1$ A, Any I/O to GND (positive)	V_C			5.6	V
	$I_{PP} = 8$ A, Any I/O to GND (positive)	V_C			8.5	
TLP dynamic resistance	I/O to GND (positive)	R_{DYN}		0.27		Ω
Junction capacitance	$V_R = 0$ V, $f = 1$ MHz, I/O to GND	C_J		10	15	pF

Rating and Characteristic Curves (CPDQT3V3HE-HF)

Fig.1 - Clamping Voltage (TLP)

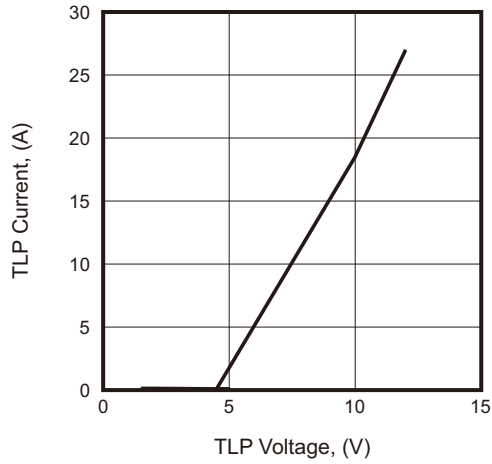


Fig.2 - Junction Capacitance

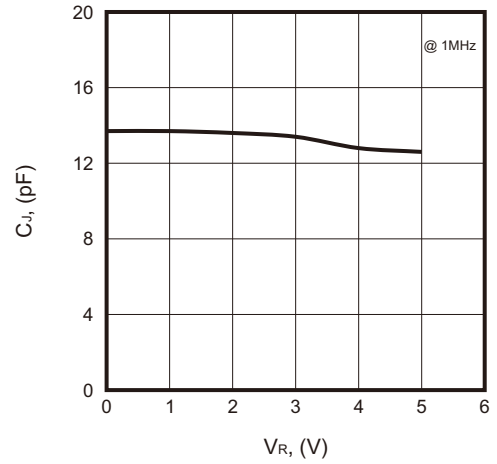


Fig.3 - 8/20 μ s Test Waveform

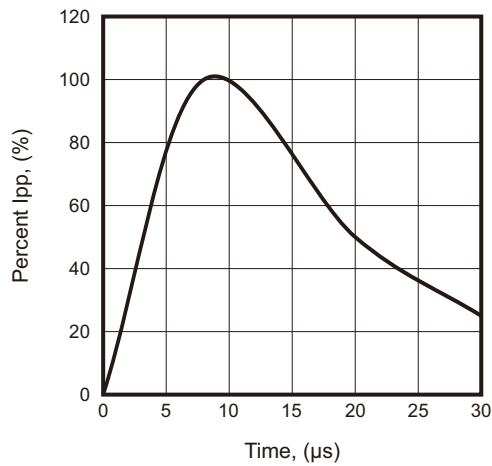
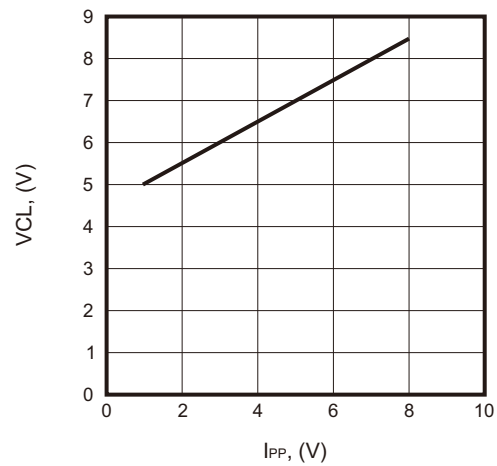
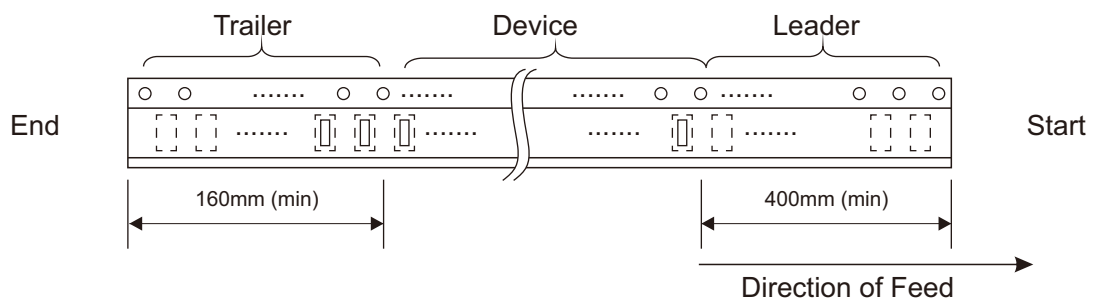
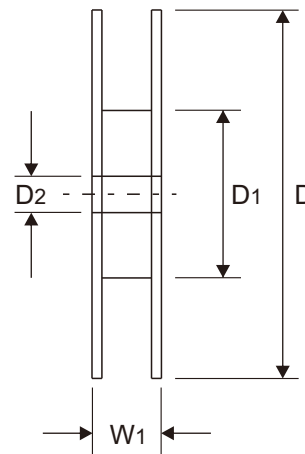
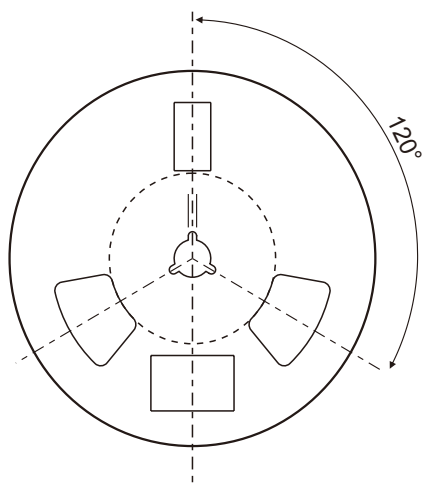
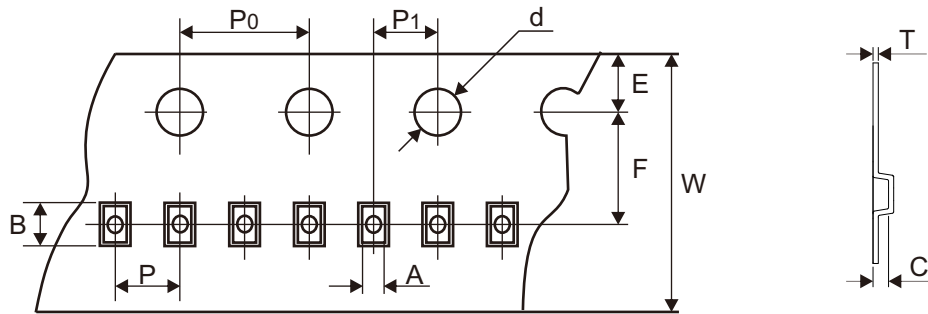


Fig.4 - Peak Pulse Power vs Clamping Voltage



Reel Taping Specification



0402/ DFN1006	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.70 ± 0.05	1.10 ± 0.05	0.45 ± 0.05	1.50 ± 0.05	178.00 ± 2.00	50.00 min.	13.00 ± 0.20
	(inch)	0.028 ± 0.002	0.043 ± 0.002	0.018 ± 0.002	0.059 ± 0.002	7.008 ± 0.079	1.969 min.	0.512 ± 0.008

0402/ DFN1006	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	9.90 max.
	(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	0.390 max.

Company reserves the right to improve product design, functions and reliability without notice.

REV:A

Marking Code

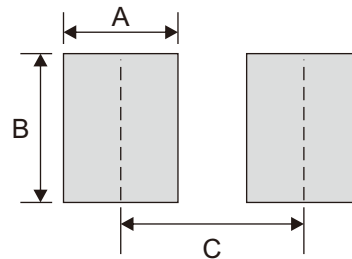
Part Number	Marking Code
CPDQT3V3HE-HF	BK, 3B



xx = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	0402/DFN1006	
	(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)
0402/DFN1006	10,000	7