

CPDZ9V0U-HF

RoHS Device
Halogen Free



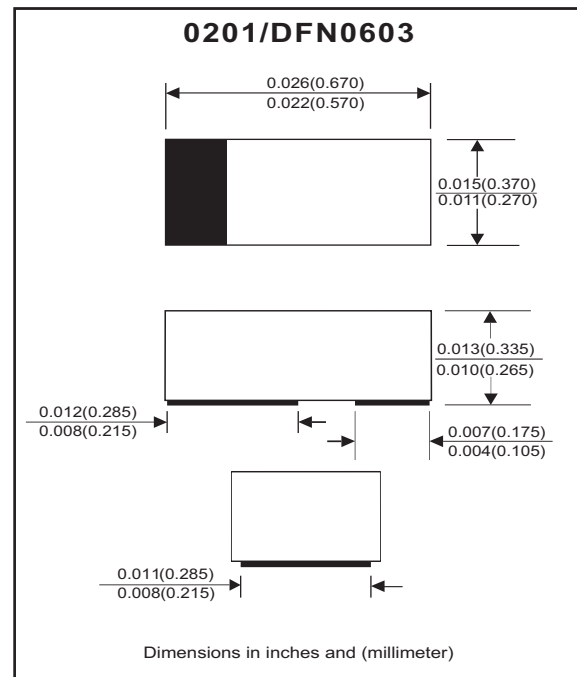
Features

- Uni-directional ESD protection.
- High reliability.
- Designed for mounting on small surface.
- Extremely thin/leadless package.

Mechanical data

- Case: 0201/DFN0603 package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Marking code: Cathode band & J
- Mounting position: Any

Circuit diagram



Maximum Rating AND Electrical Characteristics

(at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-off voltage		VRWM			9.0	V
Breakdown voltage	IR = 1mA	VBR	10	12	14	V
Forward voltage	IF = 10 mA	VF			1.0	V
Leakage current	VR = 9V	IL			1.0	uA
ESD capability	IEC 61000-4-2(air)	ESD			30	kV
	IEC 61000-4-2(contact)				30	kV
Clamping voltage	I _{PP} = 1A, T _P =8/20us	Vc			15.0	V
	I _{PP} = 2A, T _P =8/20us				17.5	
Peak pulse power	t _p = 8/20	PPP			35	W
Junction capacitance	VR = 0V, f = 1MHz	CT		14		pF
Operation temperature		Tj	-55		150	°C
Storage temperature		TSTG	-55		150	°C

RATING AND CHARACTERISTIC CURVES (CPDZ9V0U-HF)

Fig. 1 - 8/20us Peak pulse current wave form acc. IEC 61000-4-5

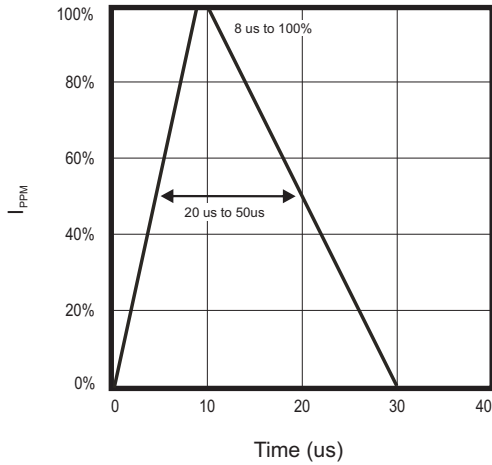


Fig.2 - Current derating curve

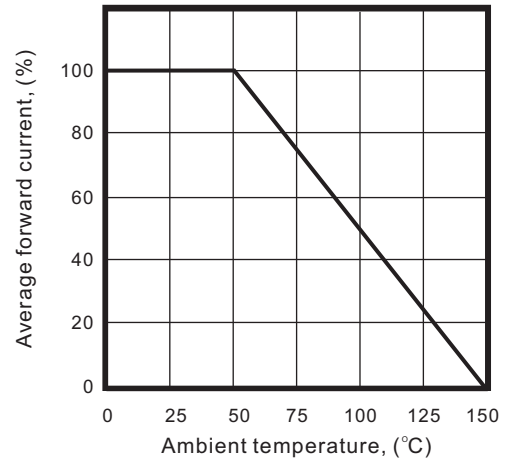


Fig. 3 - Clamping voltage vs. peak pulse current

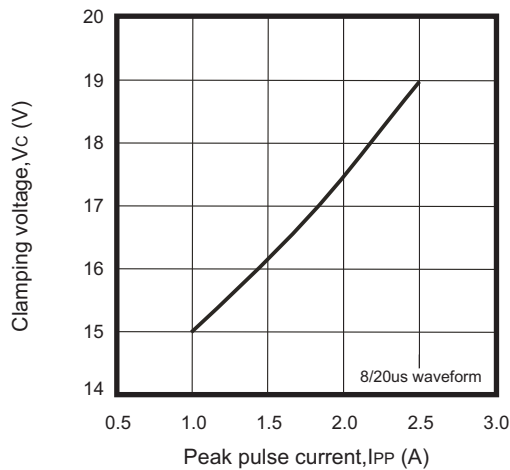


Fig.4 - Capacitance of diode

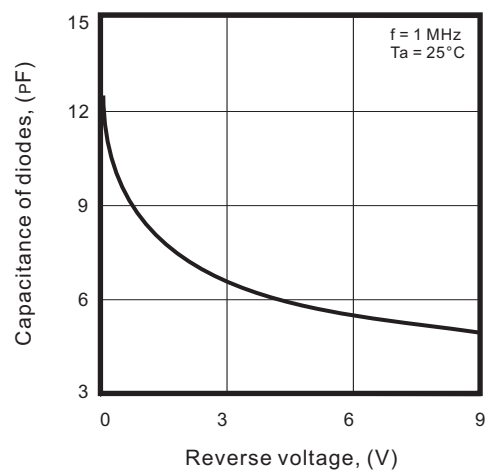
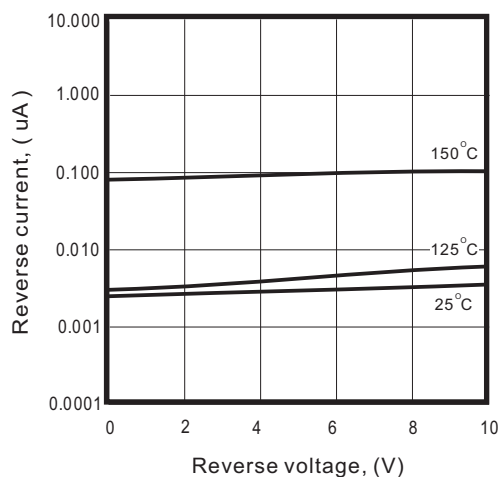
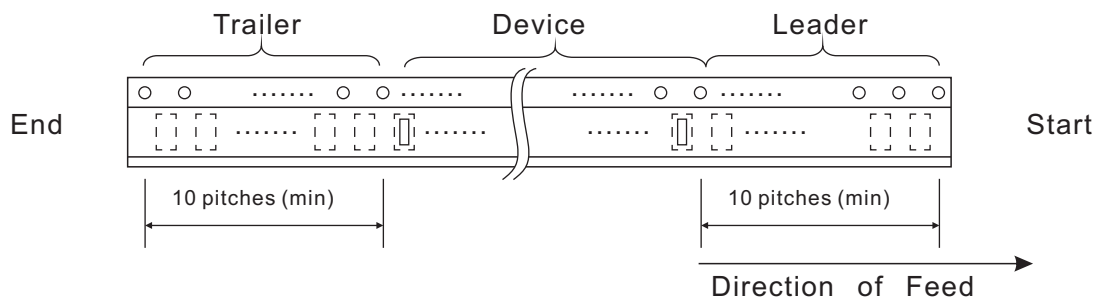
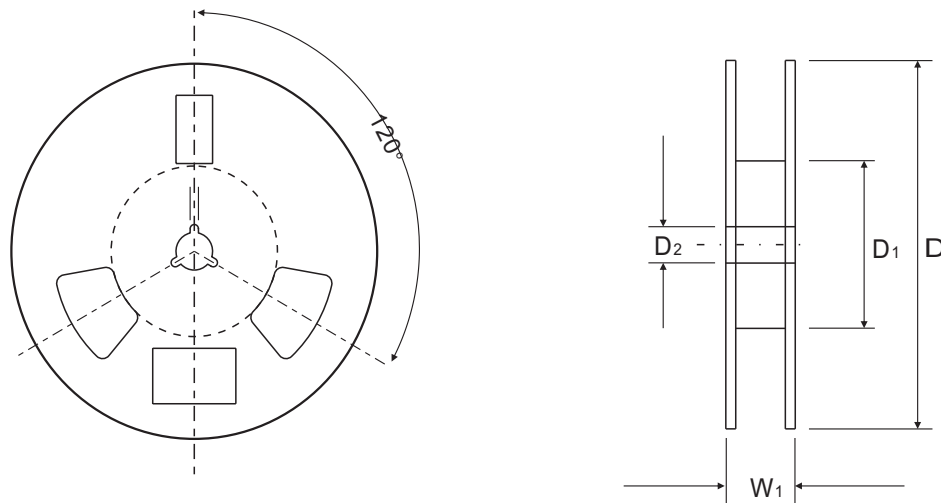
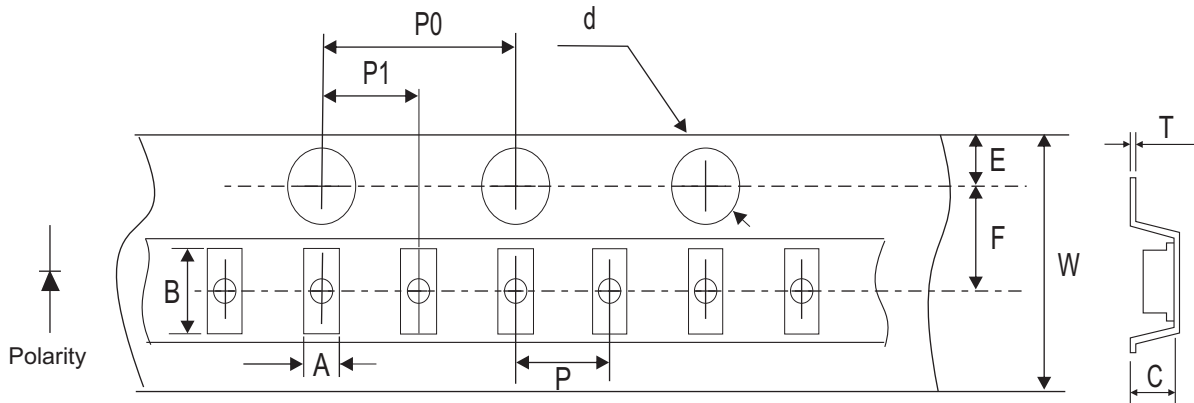


Fig. 5 - Reverse characteristics



Reel Taping Specification



0201 (DFN0603)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	0.39 +0.03/-0.02	0.72 ± 0.03	0.36 ± 0.03	1.50 + 0.10	178 ± 1.00	54.4 ± 0.40	13.0 ± 0.20
	(inch)	0.015 +0.001/0.001	0.028 ± 0.001	0.014 ± 0.001	0.059 + 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

0201 (DFN0603)	SYMBOL	E	F	P	P ₀	P ₁	T	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.05	2.00 ± 0.05	0.23 ± 0.05	8.00 ± 0.10	12.30 ± 0.10
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.002	0.315 ± 0.008	0.484 ± 0.004

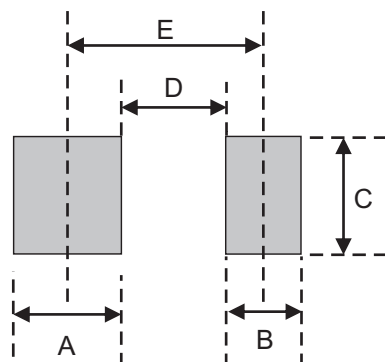
Marking Code

Part Number	Marking Code
CPDZ9V0U-HF	J



Suggested PAD Layout

SIZE	0201(DFN0603)	
	(mm)	(inch)
A	0.310	0.122
B	0.200	0.079
C	0.350	0.014
D	0.150	0.006
E	0.365	0.014



Standard Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
0201(DFN0603)	8,000	7