

ULTRA LOW CAPACITANCE BIDIRECTIONAL TVS DIODE

Features

- Ultra low leakage: nA level
- Operating voltage: 5V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test

Air discharge: ±30kV Contact discharge: ±30kV

- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (Lightning) 12A (8/20µs)
- RoHS Compliant

Applications

- USB 2.0 power and data line
- Set-top box and digital TV
- Digital video interface (DVI)
- Notebook Computers
- SIM Ports
- 10/100 Ethernet

Mechanical Characteristics

Package: DFN1006DN

Lead Finish: Lead Free

UL Flammability Classification Rating 94V-0

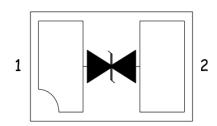
• Quantity Per Reel:10,000pcs

Reel Size:7 inch

Dimensions DFN1006DN



Pin Configuration



Absolute Maximum Ratings(Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit	
Peak Pulse Power (8/20µs)	Ррр	90	W	
ESD per IEC 61000-4-2 (Air)			Kv	
ESD per IEC 61000-4-2 (Contact)	VESD	± 15	IXV	
Operating Temperature Range	TJ	-55 to +150	$^{\circ}$	
Storage Temperature Range	Тѕтл	-55 to +150	$^{\circ}$	



Electrical Characteristics (TA=25°C unless otherwise specified)

Part Number	Device Marking	V _{RWM} (V)	V _{BR} (V)	I⊤ (mA)	V _c @1A	(Max)	c (@A)	I _R μΑ (Max)	C (Pf) (Typ.)
ULC0511C		5	6	1	15	30	3	1	0.35

Characteristic Curves

Fig1. 8/20 µs Pulse Waveform

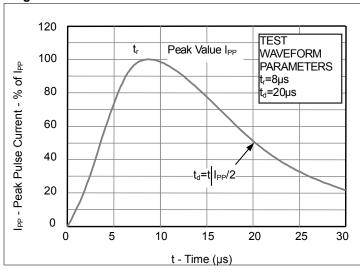


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

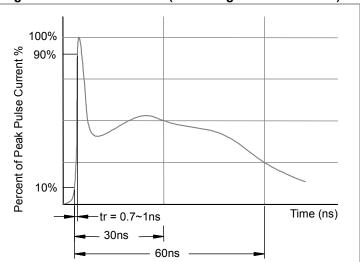
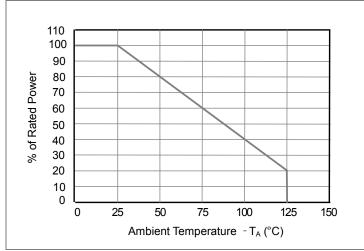


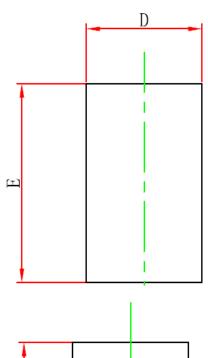
Fig3. Power Derating Curve

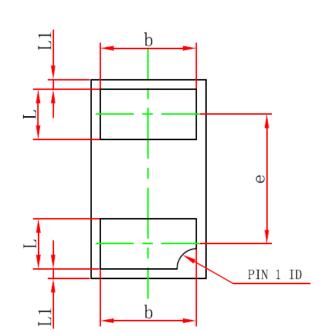


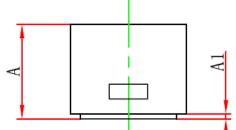
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DFN1006DN PACKAGE OUTLINE & DIMENSIONS







Symbol	Dimensions I	n Millimeters	Dimensions In Inches		
	Min.	Max.	Min.	Max.	
Α	0.400	0.500	0.016	0.020	
A1	0.000	0.050	0.000	0.002	
D	0.550	0.650	0.022	0.026	
Е	0.950	1.050	0.037	0.041	
b	0.400	0.600	0.016	0.024	
е	0.650TYP.		0.026TYP.		
L	0.150	0.350	0.006	0.014	
L1	0.050	REF.	0.002REF.		

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