

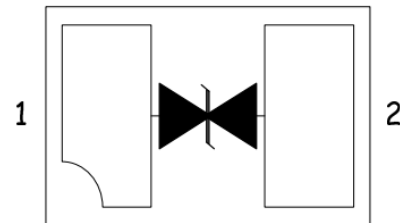
Features

- Ultra low leakage: nA level
- Operating voltage: 8V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 30\text{kV}$
 - Contact discharge: $\pm 30\text{kV}$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5 (Lightning) 12A (8/20 μs)
- RoHS Compliant

Dimensions DFN1006DN



Pin Configuration



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

Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

| Parameter | Symbol | Value | Unit |
|--|------------------|-------------|------|
| Peak Pulse Power (8/20 μs) | P _{pp} | 250 | W |
| ESD per IEC 61000-4-2 (Air) | V _{ESD} | ± 30 | Kv |
| ESD per IEC 61000-4-2 (Contact) | | ± 30 | |
| Operating Temperature Range | T _J | -55 to +150 | °C |
| Storage Temperature Range | T _{STJ} | -55 to +150 | °C |

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

| Part Number | Device Marking | V _{RWM} (V) | V _{BR} (V) | I _T (mA) | V _C @1A | V _C | | I _R μA (Max) | C (Pf) (Typ.) |
|-------------|----------------|----------------------|---------------------|---------------------|--------------------|----------------|------|-------------------------|---------------|
| | | | | | | (Max) | (@A) | | |
| SDA0811CDN | D8 | 8 | 8.5 | 1 | 10.5 | 22 | 10 | 1 | 45 |

Characteristic Curves

Fig1. 8/20μs Pulse Waveform

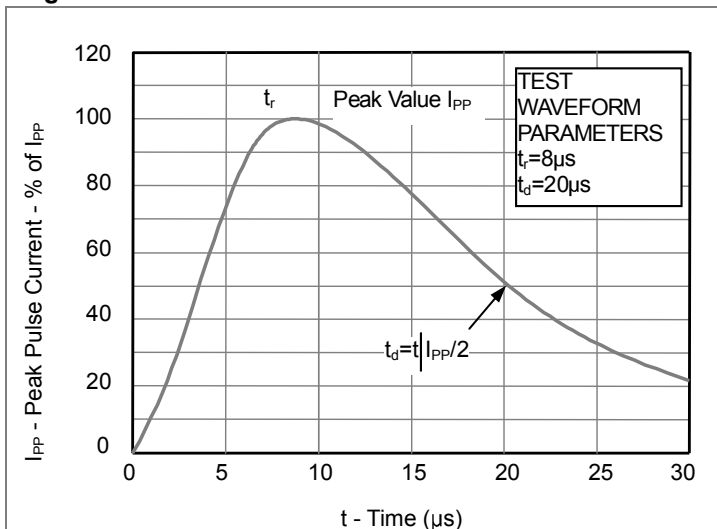


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

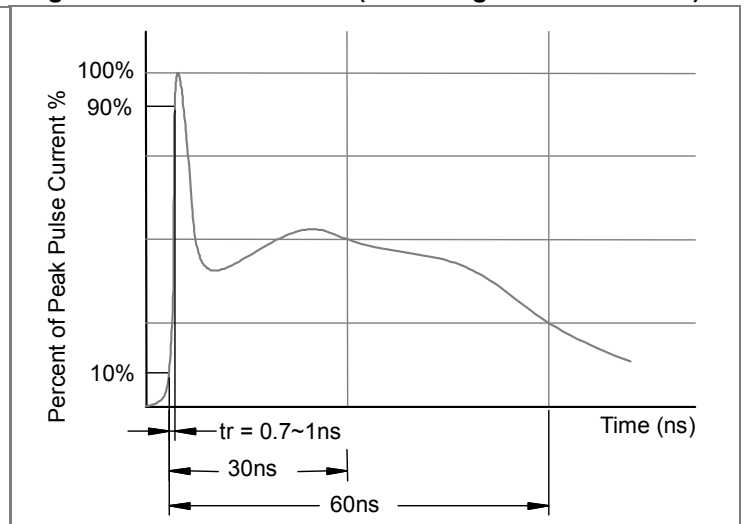
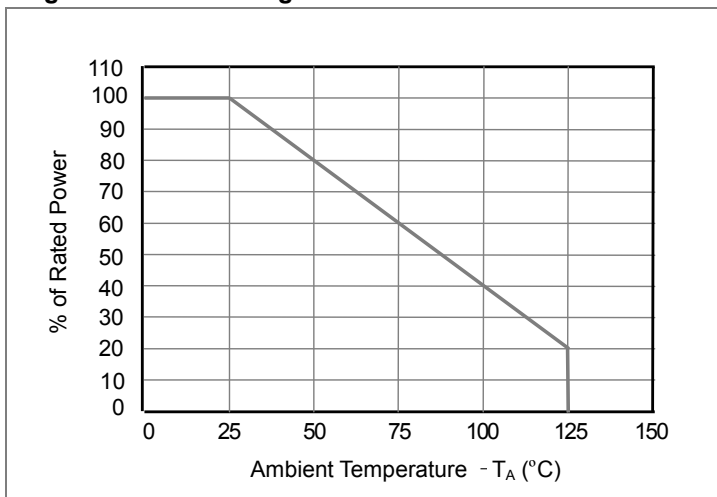
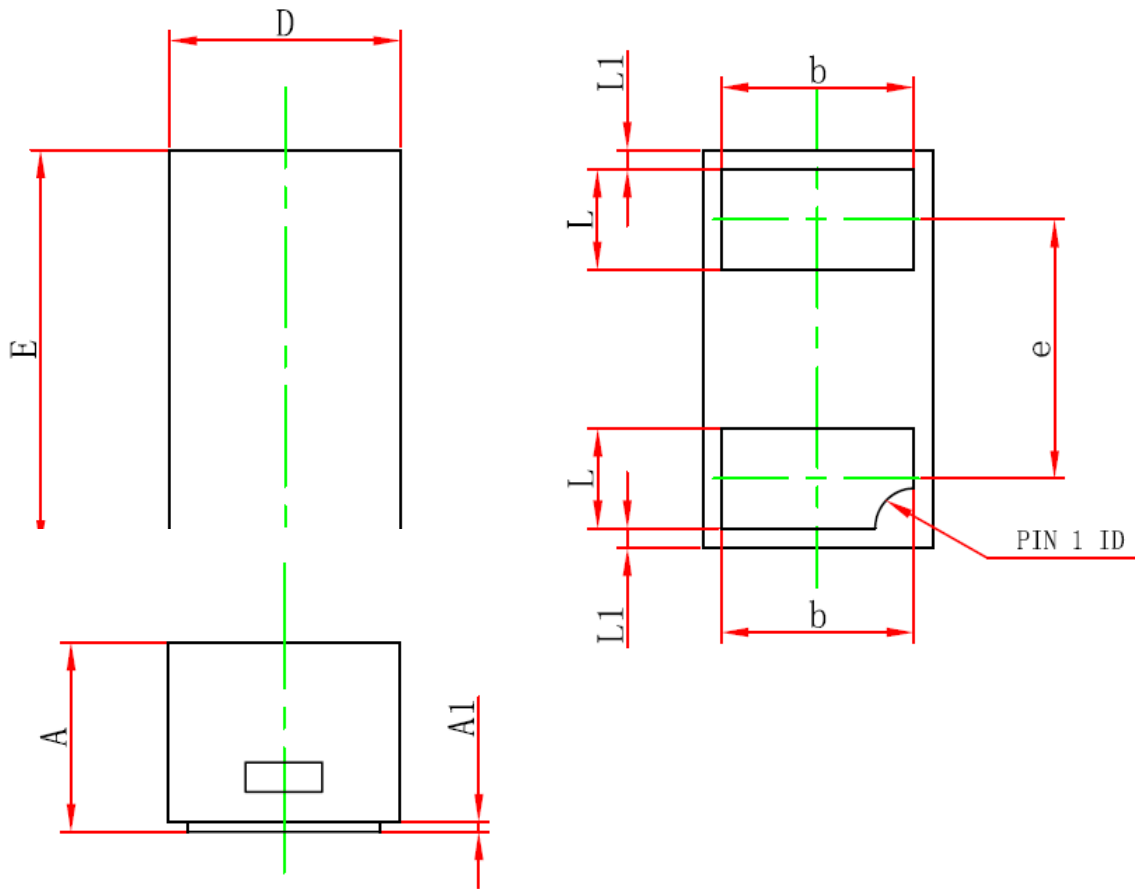


Fig3. Power Derating Curve



DFN1006DN PACKAGE OUTLINE & DIMENSIONS



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 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 |
| E | 0.950 | 1.050 | 0.037 | 0.041 |
| b | 0.400 | 0.600 | 0.016 | 0.024 |
| e | 0.650TYP. | | 0.026TYP. | |
| L | 0.150 | 0.350 | 0.006 | 0.014 |
| L1 | 0.050REF. | | 0.002REF. | |

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