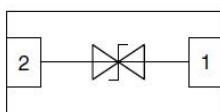
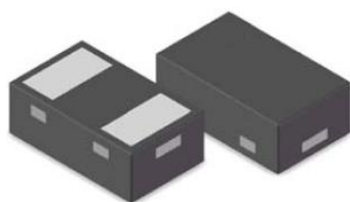


### Features

- ◆60Watts peak pulse power (tp = 8/20us)
- ◆DFN1006 package
- ◆Bidirectional configurations
- ◆Solid-state silicon-avalanche technology
- ◆Low clamping voltage
- ◆Low leakage current
- ◆Medium capacitance (CJ=6pF typ.)
- ◆Protection one data/power line to:  
IEC 61000-4-2 ±8kV contact ±15kV air  
IEC 61000-4-4 (EFT) 40A (5/50ns)  
IEC 61000-4-5 (Lightning) 6A (8/20μs)



### Applications

- ◆Audio Line, Speaker, Headset,  
Microphone Protection
- ◆Human Interface Devices  
(Keyboard, Touchpad, Buttons)

### Mechanical Data

- ◆Case: DFN1006 (plastic package).Lead free; RoHS compliant
- ◆Molding Compound Flammability Rating:UL 94 V-0
- ◆Terminals: High temperature soldering guaranteed:260 °C/10 sec. at terminals

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

| Parameter                                 | Symbol | Value       | Unit |
|-------------------------------------------|--------|-------------|------|
| Peak Pulse Power (TP=8/20μS)              | PPP    | 60          | W    |
| ESD contact/air discharge (IEC-61000-4-2) | VESD   | 8/15        | kV   |
| Peak Pulse Current ( tP = 8/20μS )        | IPP    | 6           | A    |
| Junction Temperature                      | TJ     | -55 to +125 | °C   |
| Storage temperature                       | TSTG   | -55 to +150 | °C   |

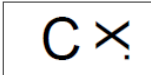
### Ordering/Mark information

**CES D1006 NC 5V B**

↓ Directional : Bidirectional  
 ↓ Working voltage : 5V  
 ↓ Capacitance type : Normal capacitance  
 Package : (DFN1006)



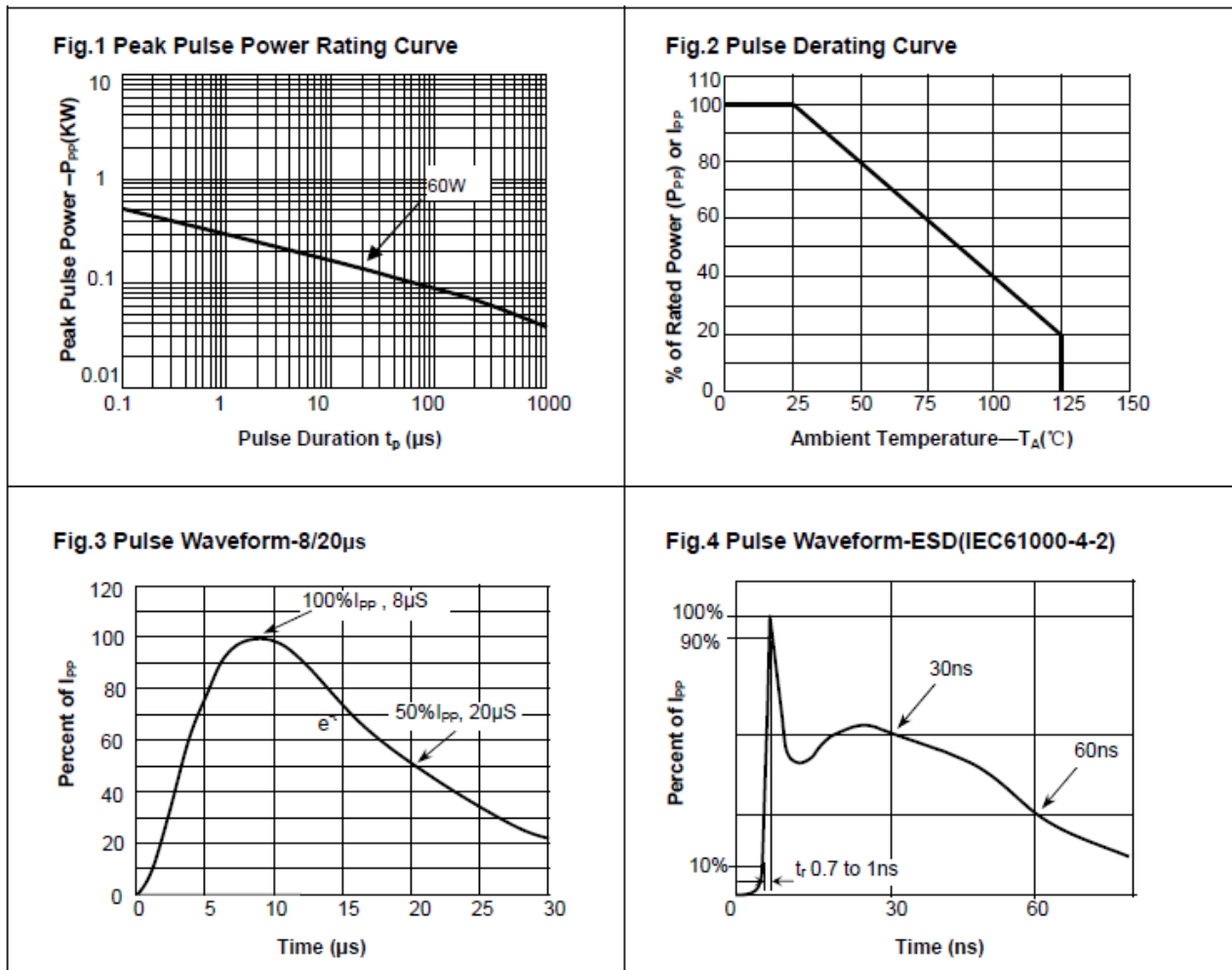
## ESD Protection Diode in DFN1006

| Order code                                                                        | Package | Packaging option | Base quantity    | Packaging specification |
|-----------------------------------------------------------------------------------|---------|------------------|------------------|-------------------------|
| CESD1006NC5VB                                                                     | DFN1006 | Tape and reel    | 10,000pcs / reel | EIA STD RS-481          |
| Marking                                                                           |         |                  |                  |                         |
|  |         |                  | X:DATE CODE      |                         |

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

| Parameter                        | Symbol | Condition     | Min | Typ | Max | Unit |
|----------------------------------|--------|---------------|-----|-----|-----|------|
| Reverse stand-off Voltage        | VRWM   |               |     |     | 5.0 | V    |
| Reverse Breakdown Voltage        | VBR    | =IT 1mA       | 6.0 |     |     | V    |
| Reverse Leakage Current          | IR     | VR= 5V        |     |     | 1.0 | uA   |
| Clamping Voltage (IEC 61000-4-5) | VC     | =IPP 6A       |     |     | 10  | V    |
| Junction Capacitance             | CJ     | VR=0V, f=1MHz |     | 6   | 8   | pF   |

### Typical Characteristics (Tamb = 25°C unless otherwise specified)



## Package Dimensions

