

## Features

- Low leakage current
- Low clamping voltage
- IEC 61000-4-2 (ESD Air):  $\pm 25\text{kV}$
- IEC 61000-4-2 (ESD Contact):  $\pm 22\text{kV}$
- IEC 61000-4-5 (Lightning 8/20 $\mu\text{s}$ ): 2A

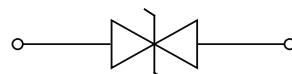
**Reverse Working Voltage**

5.0V Max.

**Low capacitance**

2.5pF(Typ.)

**DFN1006-2L**



## Applications

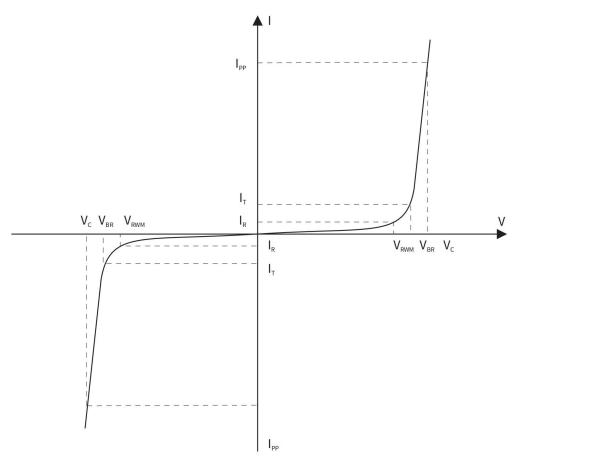
- Cellular Handsets and Accessories
- Notebooks and Handhelds
- Audio Players, Peripherals
- Personal Digital Assistants
- Portable Instrumentation
- Keypads, Side Keys, LCD Displays

## Maximum Ratings ( Ta=25°C Unless otherwise specified)

| SYMBOL    | PARAMETER                           | CONDITIONS                       | VALUE       | UNIT |
|-----------|-------------------------------------|----------------------------------|-------------|------|
| $V_{ESD}$ | Electrostatic Discharge Voltage     | ESD per IEC 61000-4-2( Air )     | $\pm 25$    | KV   |
|           |                                     | ESD per IEC 61000-4-2( Contact ) | $\pm 22$    | KV   |
| $P_{PP}$  | Peak Pulse Power                    | $tp = 8/20 \mu\text{s}$          | 25          | W    |
| $I_{PP}$  | Rated Peak Pulse Current            | $tp = 8/20 \mu\text{s}$          | 2.0         | A    |
| $T_J$     | Operating JunctionTemperature Range | —                                | -55 to +125 | °C   |
| $T_{STG}$ | Operating JunctionTemperature Range | —                                | -55 to +125 | °C   |

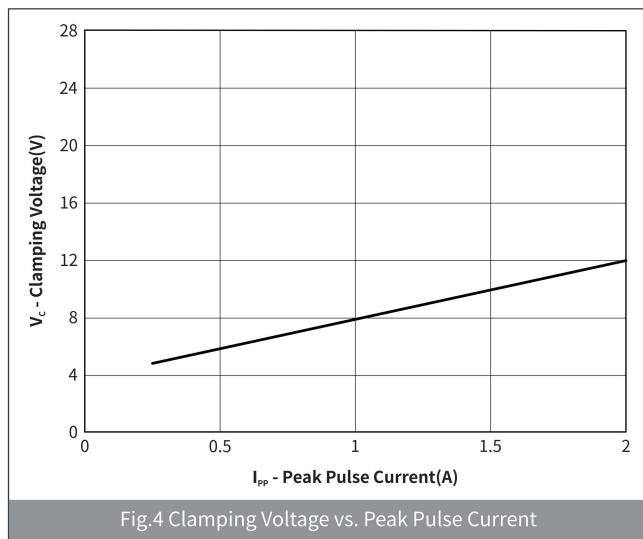
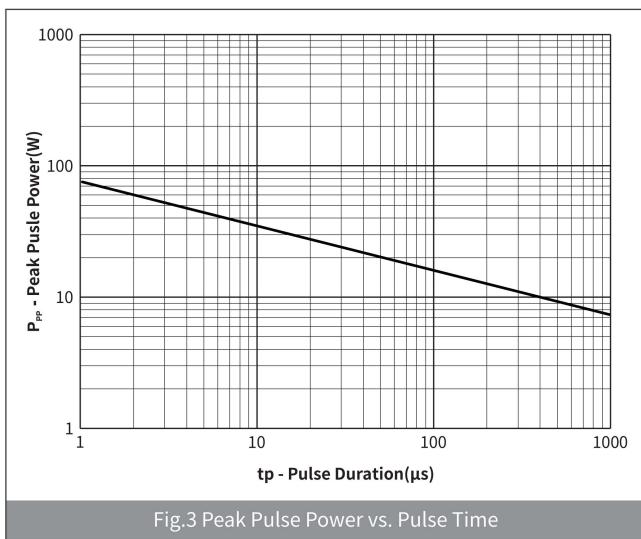
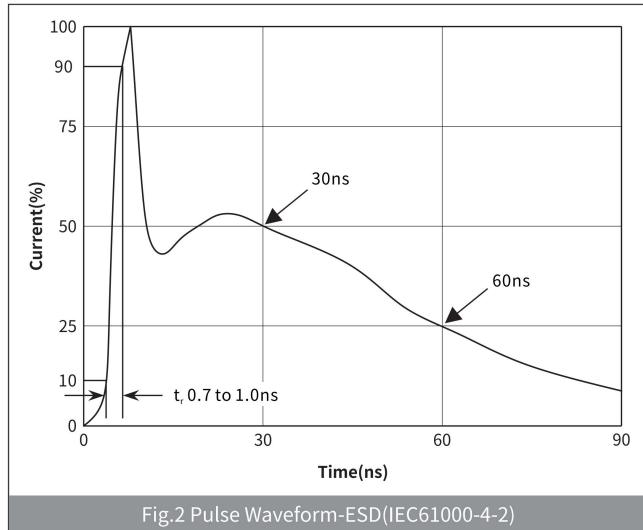
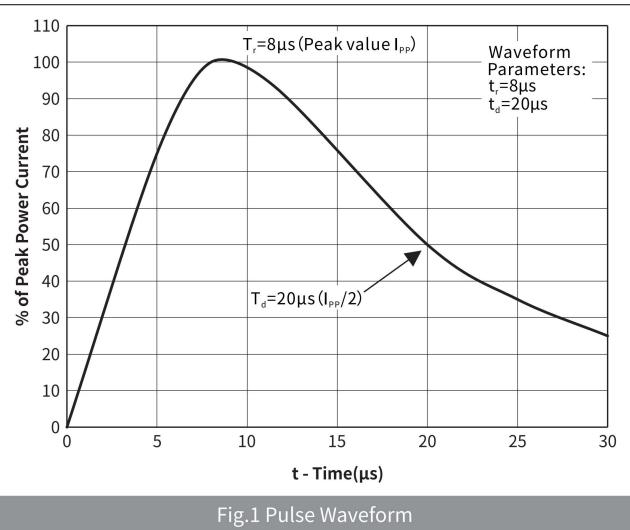
## Electrical Parameter

| SYMBOL    | PARAMETER   |
|-----------|---|
| $V_C$     | Clamping Voltage @ $I_{PP}$                           |
| $V_{BR}$  | Breakdown Voltage @ $I_T$                             |
| $I_{PP}$  | Peak Pulse Current                                    |
| $I_T$     | Test Current  |
| $I_R$     | Reverse Leakage Current @ VRWM                        |
| $V_{RWM}$ | Peak Reverse Working Voltage                          |
| $P_{PP}$  | Peak Pulse Power Dissipation                          |
| $C_J$     | Junction Capacitance @ $V_R=0\text{V}, f=1\text{MHz}$ |
| $I_F$     | Forward Current                                       |
| $V_F$     | Forward Voltage @ $I_F$                               |



**Electrical Characteristics** (Ta=25°C Unless otherwise specified)

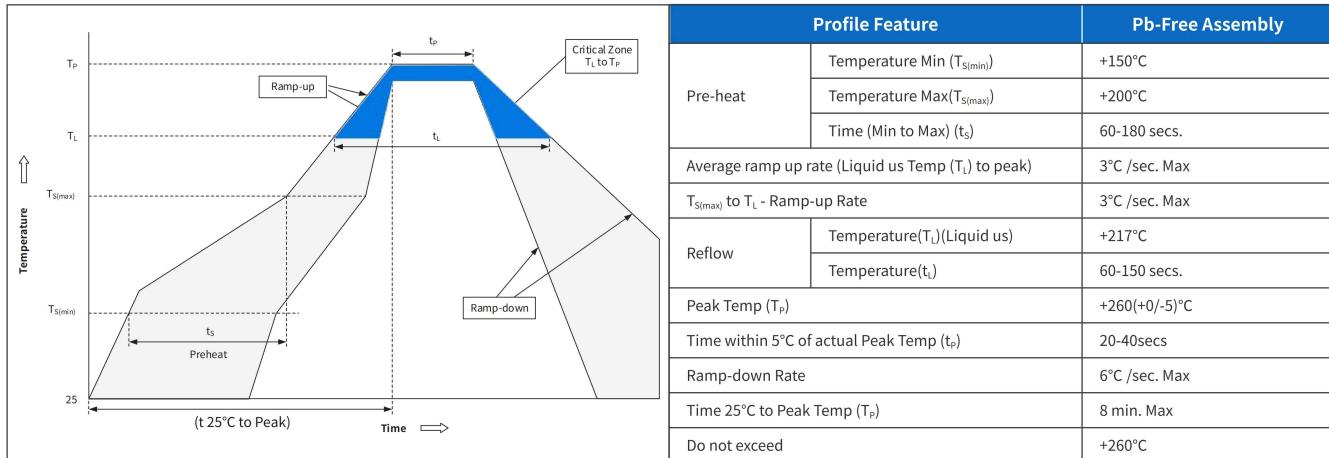
| PARAMETER                    | SYMBOL           | CONDITION                                     | Min | Typ | Max | UNIT |
|------------------------------|------------------|---|-----|-----|-----|------|
| Peak Reverse Working Voltage | V <sub>RWM</sub> | T <sub>a</sub> =25°C                          | —   | —   | 5.0 | V    |
| Breakdown Voltage            | V <sub>BR</sub>  | I <sub>R</sub> =1.0mA,T <sub>a</sub> =25°C    | 6.0 | —   | 10  | V    |
| Reverse Leakage Current      | I <sub>R</sub>   | V <sub>RWM</sub> =5V,T <sub>a</sub> =25°C     | —   | —   | 0.2 | μA   |
| Clamping Voltage             | V <sub>C</sub>   | I <sub>PP</sub> =2.0A, t <sub>p</sub> =8/20μs | —   | —   | 12  | V    |
| Junction Capacitance         | C <sub>J</sub>   | V <sub>RWM</sub> =0V,f=1MHz                   | —   | 2.5 | 3.5 | pF   |

**Ratings And Characteristics Curves** (Ta=25°C Unless otherwise specified)

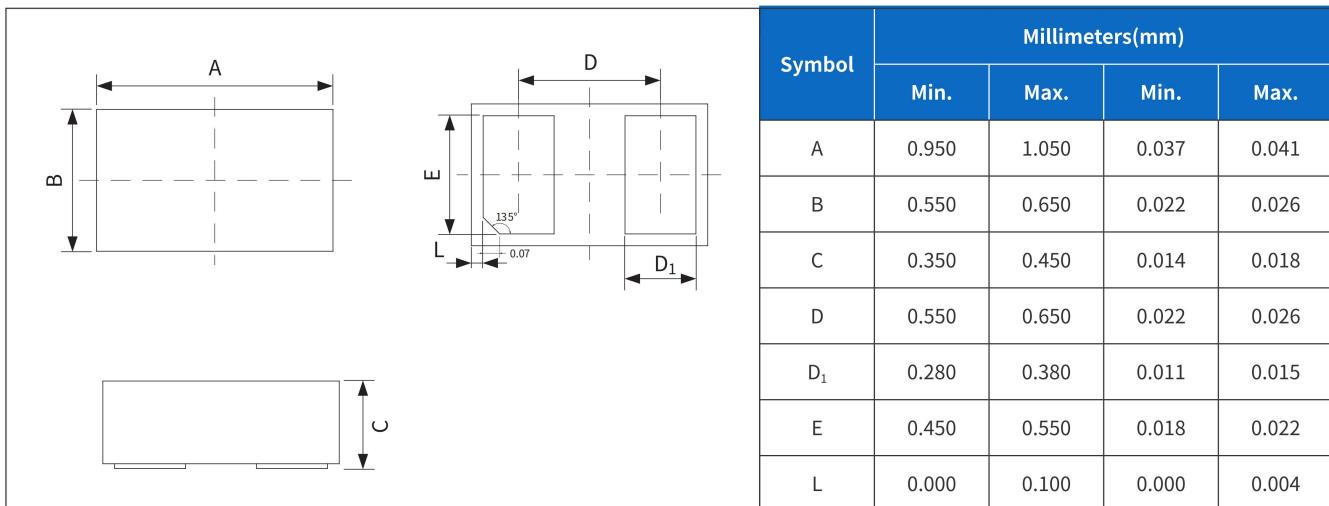
## Ordering Information

| PREFERRED P/N | PACKAGE    | SIZE(mm)       | DELIVERY MODE | MPQ(PCS) |
|---------------|------------|----------------|---------------|----------|
| H5VS10BC      | DFN1006-2L | 1.00×0.60×0.37 | 7" REEL       | 10,000   |

## Recommended Soldering Conditions



## Package Outline Dimensions (DFN1006-2L)



## Suggested Pad Layout

