

DFN2510-10 Plastic-Encapsulate ESD Protection Diodes

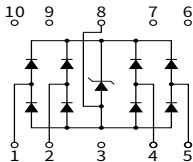
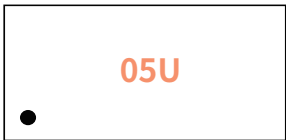
Features

- Low leakage current
- Low clamping voltage
- IEC 61000-4-2 (ESD Air): ±20kV
- IEC 61000-4-2 (ESD Contact): ±15kV
- IEC 61000-4-5 (Lightning 8/20μs): 4A

Applications

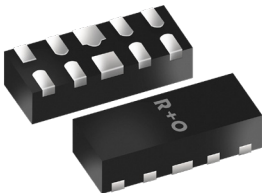
- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation,Digital Cameras
- Peripherals, Audio Players, Industrial Equipment

Function Diagram



Reverse Working Voltage  
3.3V Max.  
Low capacitance  
0.55pF(Max.)

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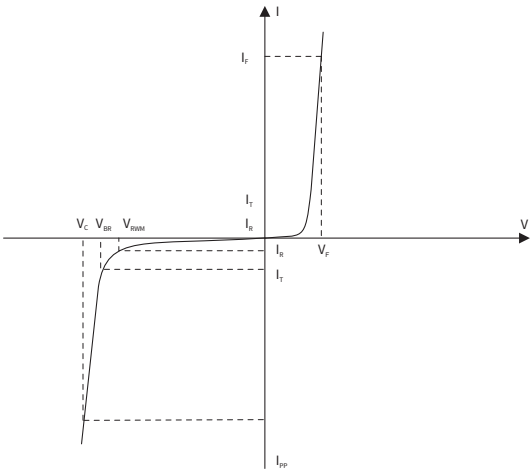


Maximum Ratings (Ta=25°C Unless otherwise specified)

| SYMBOL           | PARAMETER                           | CONDITIONS                      | VALUE       | UNIT |
|------------------|-------------------------------------|---------------------------------|-------------|------|
| VESD             | Electrostatic Discharge Voltage     | ESD per IEC 61000-4-2( Air )    | ±20         | KV   |
|                  |                                     | ESD per IEC 61000-4-2( Contact) | ±15         | KV   |
| P <sub>PP</sub>  | Peak Pulse Power                    | tp = 8/20 μs                    | 48          | W    |
| I <sub>PP</sub>  | Rated Peak Pulse Current            | tp = 8/20 μs                    | 4           | A    |
| T <sub>J</sub>   | Operating JunctionTemperature Range | —                               | -55 to +150 | °C   |
| T <sub>STG</sub> | Operating JunctionTemperature Range | —                               | -55 to +150 | °C   |

Electrical Parameter

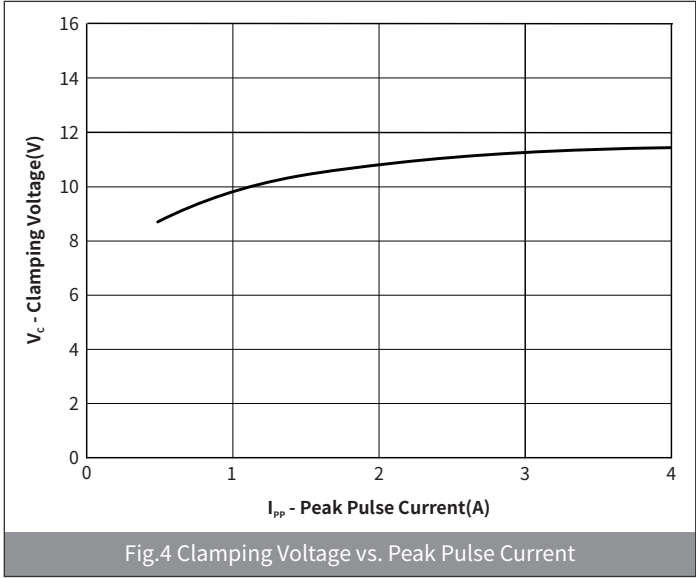
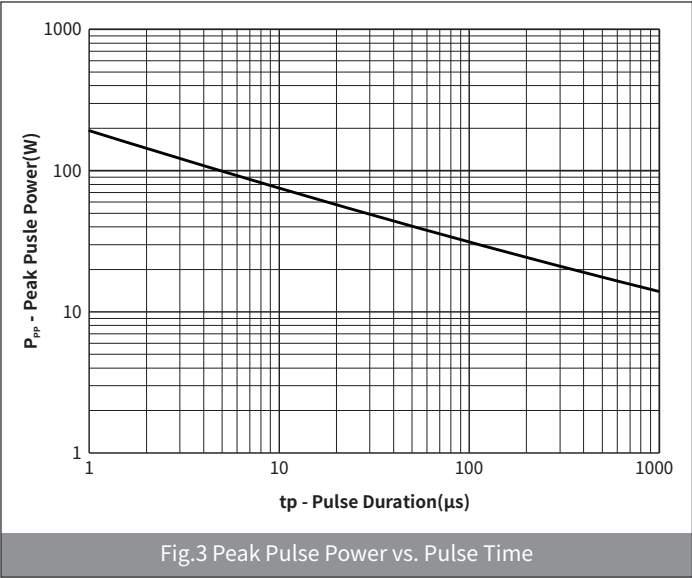
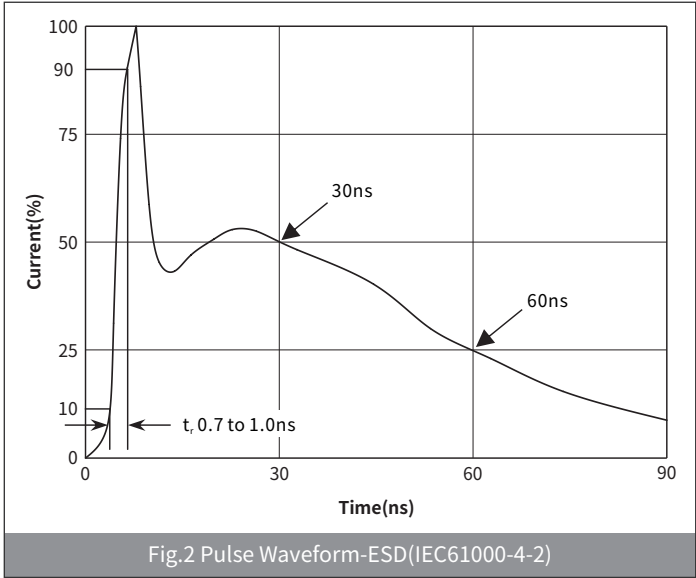
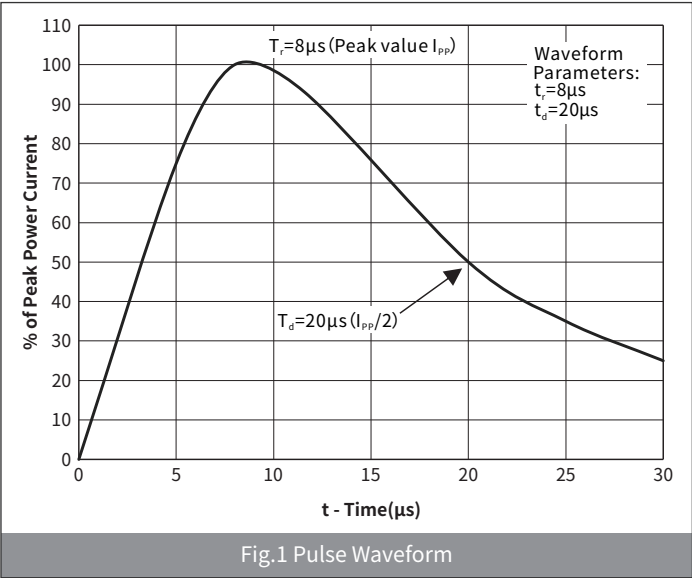
| SYMBOL           | PARAMETER                                        |
|------------------|--------------------------------------------------|
| V <sub>C</sub>   | Clamping Voltage @ I <sub>PP</sub>               |
| V <sub>BR</sub>  | Breakdown Voltage @ I <sub>T</sub>               |
| I <sub>PP</sub>  | Peak Pulse Current                               |
| I <sub>T</sub>   | Test Current                                     |
| I <sub>R</sub>   | Reverse Leakage Current @ VRWM                   |
| V <sub>RWM</sub> | Peak Reverse Working Voltage                     |
| P <sub>PP</sub>  | Peak Pulse Power Dissipation                     |
| C <sub>J</sub>   | Junction Capacitance @ V <sub>R</sub> =0V,f=1MHz |
| I <sub>F</sub>   | Forward Current                                  |
| V <sub>F</sub>   | Forward Voltage @I <sub>F</sub>                  |



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

| PARAMETER                    | SYMBOL    | CONDITION                                     | Min | Typ | Max  | UNIT          |
|------------------------------|-----------|-----------------------------------------------|-----|-----|------|---------------|
| Peak Reverse Working Voltage | $V_{RWM}$ | $T_a=25^{\circ}\text{C}$                      | —   | —   | 3.3  | V             |
| Breakdown Voltage            | $V_{BR}$  | $I_T=1\text{mA}, T_a=25^{\circ}\text{C}$      | 4.0 | —   | —    | V             |
| Reverse Leakage Current      | $I_R$     | $V_{RWM}=3.3\text{V}, T_a=25^{\circ}\text{C}$ | —   | —   | 0.5  | $\mu\text{A}$ |
| Clamping Voltage             | $V_C$     | $I_{PP}=4\text{A}, t_p=8/20\mu\text{s}$       | —   | —   | 12   | V             |
| Junction Capacitance         | $C_J$     | $V_{RWM}=0\text{V}, f=1\text{MHz}$            | —   | 0.5 | 0.55 | pF            |

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



# H3V3L25U

Uni-directional 3.3V Low Capacitance ESD

## ● Ordering Information

| PREFERED P/N | PACKAGE | SIZE(mm)       | DELIVERY MODE | MPQ(PCS) |
|--------------|---------|----------------|---------------|----------|
| H3V3L25U     | DFN2510 | 2.50×1.00×0.50 | 7" REEL       | 3,000    |

## ● Recommended Soldering Conditions



## ● Package Outline Dimensions (DFN2510)

