

DFN0603-2L Plastic-Encapsulate ESD Protection Diodes

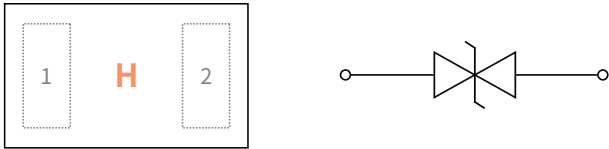
Features

- Low leakage current
- Low clamping voltage
- IEC 61000-4-2 (ESD Air): ±25kV
- IEC 61000-4-2 (ESD Contact): ±20kV
- IEC 61000-4-5 (Lightning 8/20μs): 5A

Applications

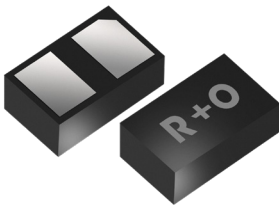
- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation,Digital Cameras
- Peripherals, Audio Players
- Industrial Equipment

Function Diagram



Reverse Working Voltage
3.3V Max.
Ultra Small capacitance
0.5pF(Max.)

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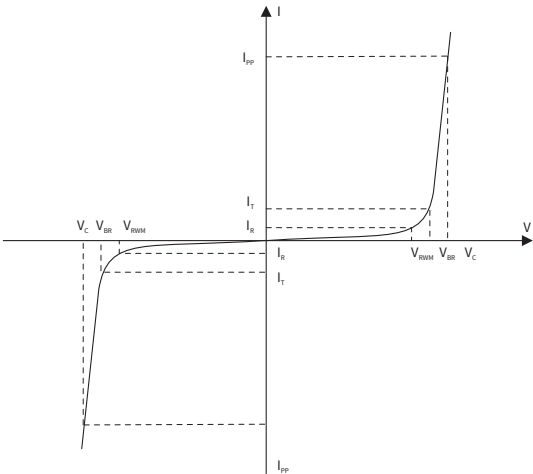


Maximum Ratings (Ta=25°C Unless otherwise specified)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-------------------------------------|---------------------------------|-------------|------|
| VESD | Electrostatic Discharge Voltage | ESD per IEC 61000-4-2(Air) | ±25 | KV |
| | | ESD per IEC 61000-4-2(Contact) | ±20 | KV |
| P _{PP} | Peak Pulse Power | tp = 8/20 μs | 125 | W |
| I _{PP} | Rated Peak Pulse Current | tp = 8/20 μs | 5.0 | A |
| T _J | Operating JunctionTemperature Range | — | -55 to +125 | °C |
| T _{STG} | Operating JunctionTemperature Range | — | -55 to +125 | °C |

Electrical Parameter

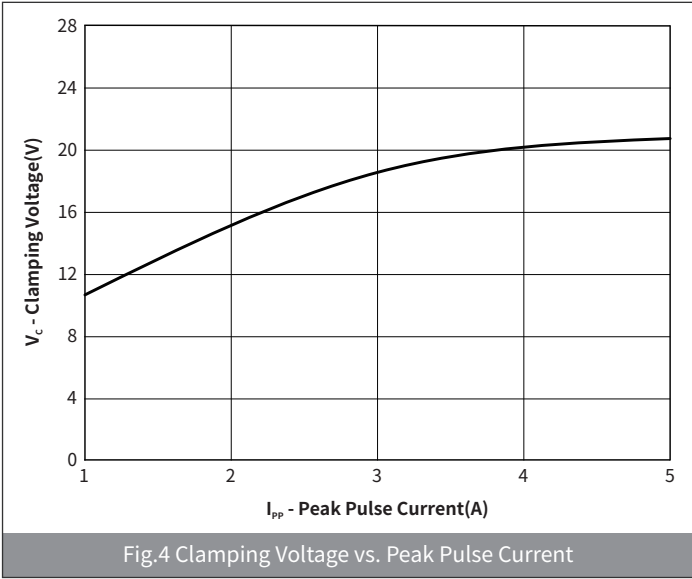
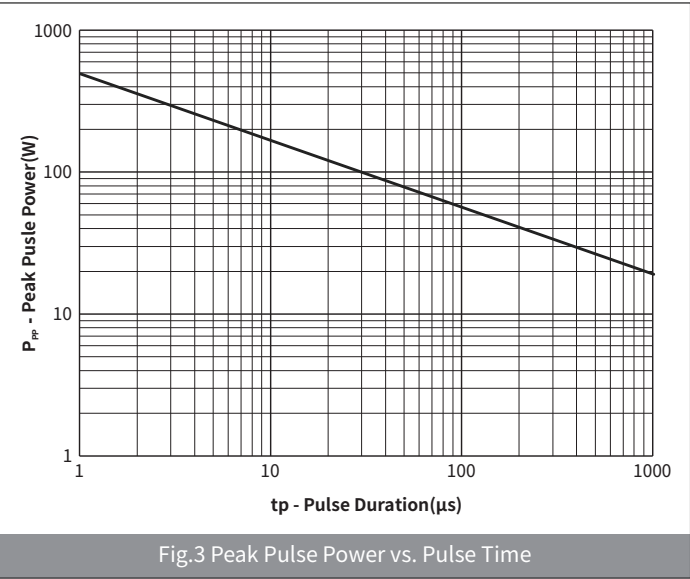
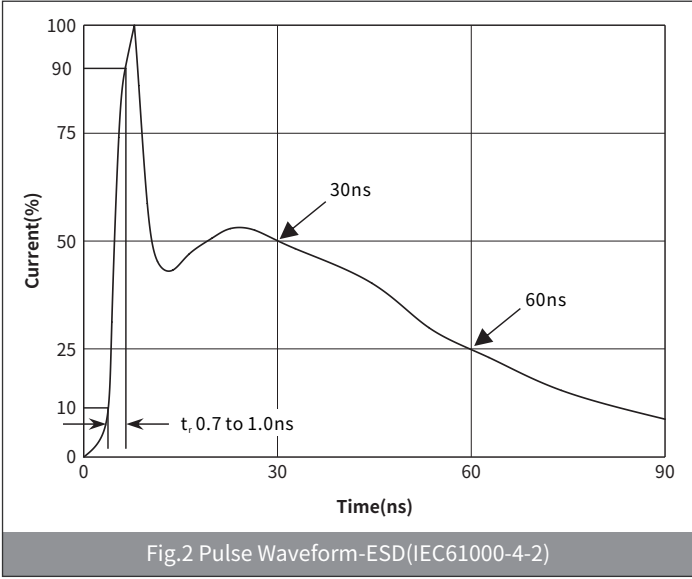
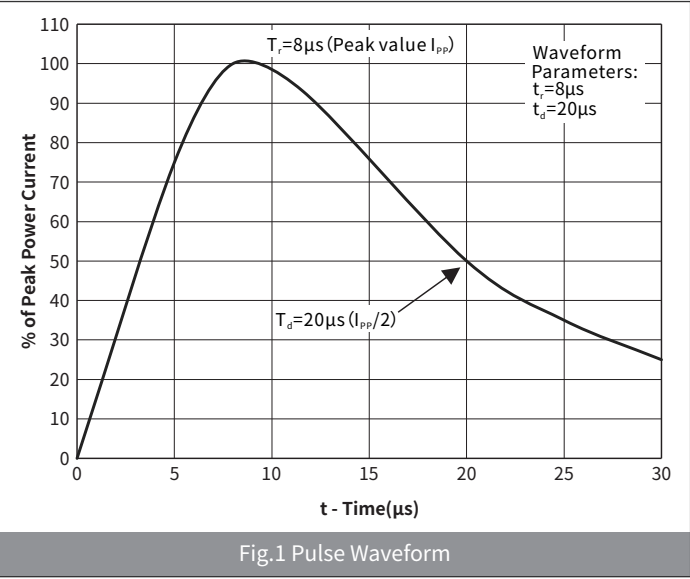
| SYMBOL | PARAMETER |
|------------------|--|
| V _C | Clamping Voltage @ I _{PP} |
| V _{BR} | Breakdown Voltage @ I _T |
| I _{PP} | Peak Pulse Current |
| I _T | Test Current |
| I _R | Reverse Leakage Current @ VRWM |
| V _{RWM} | Peak Reverse Working Voltage |
| P _{PP} | Peak Pulse Power Dissipation |
| C _J | Junction Capacitance @ V _R =0V,f=1MHz |
| 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_{RWM} | $T_a=25^{\circ}C$ | — | — | 3.3 | V |
| Breakdown Voltage | V_{BR} | $I_R=1.0mA, T_a=25^{\circ}C$ | 6.0 | — | 9.0 | V |
| Reverse Leakage Current | I_R | $V_R=3.3V, T_a=25^{\circ}C$ | — | — | 0.2 | μA |
| Clamping Voltage | V_C | $I_{PP}=1.0A, t_p=8/20\mu s$ | — | — | 11 | V |
| | | $I_{PP}=5.0A, t_p=8/20\mu s$ | — | — | 25 | |
| Junction Capacitance | C_J | $V_{RWM}=0V, f=1MHz$ | — | 0.3 | 0.5 | pF |

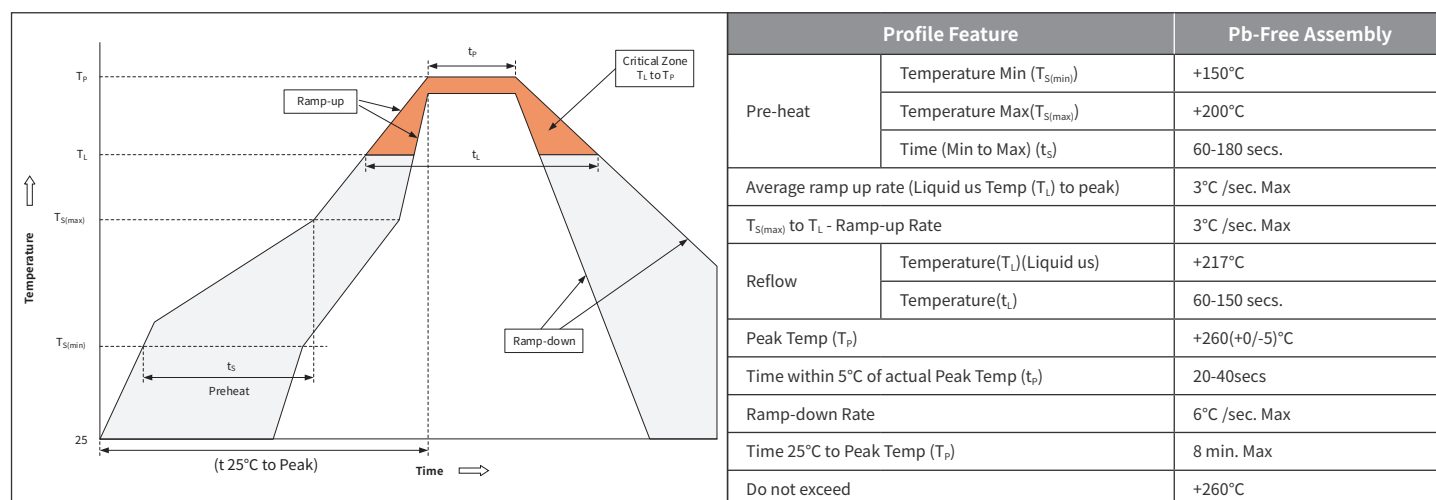
● Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



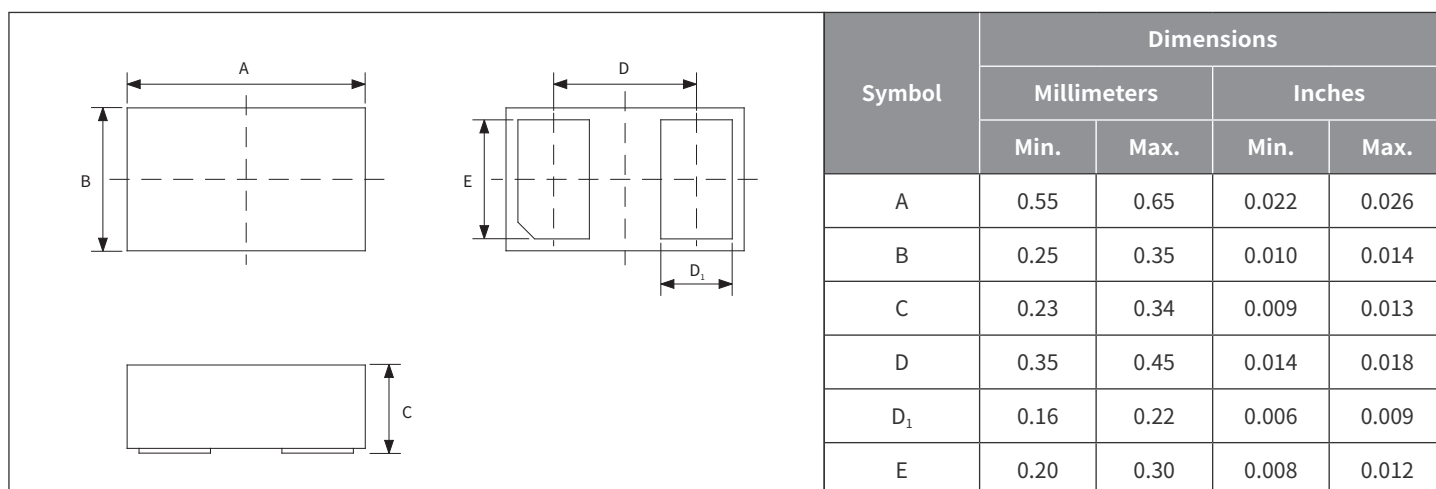
Ordering Information

| PREFERED P/N | PACKAGE | SIZE(mm) | DELIVERY MODE | MPQ(PCS) |
|--------------|------------|---------------|---------------|----------|
| H3V3U06B | DFN0603-2L | 0.6×0.30×0.30 | 7" REEL | 15,000 |

Recommended Soldering Conditions



Package Outline Dimensions (DFN0603-2L)



Suggested Pad Layout

