

Features

- Low capacitance: 15pF(Typ.)
- Reverse Working Voltage: 5V
- Bi-directional protection
- DFN0603 surface mount package
- IEC 61000-4-2 (ESD Air): $\pm 25\text{kV}$
- IEC 61000-4-2 (ESD Contact): $\pm 25\text{kV}$
- IEC 61000-4-5 (Lightning 8/20 μs): 5A

Applications

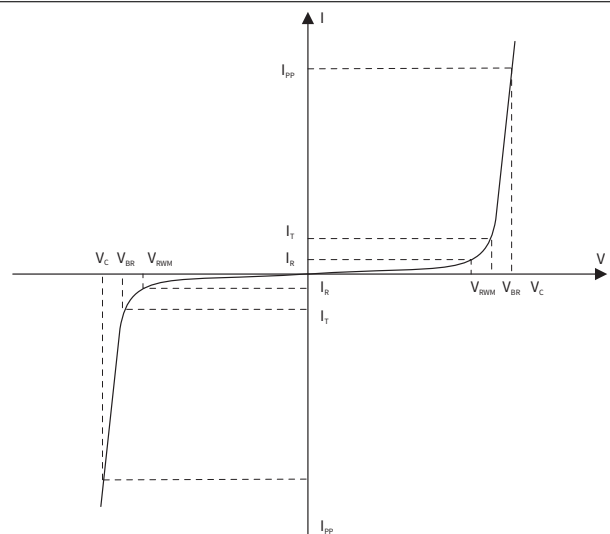
- Smart Phone and Tablet PC
- TV and Set Top Box
- Wearable Devices
- Digital cameras
- PADS

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

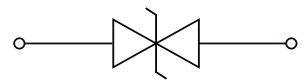
| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-------------------------------------|----------------------------------|-------------|------|
| V_{ESD} | Electrostatic Discharge Voltage | ESD per IEC 61000-4-2(Air) | ± 25 | KV |
| | | ESD per IEC 61000-4-2(Contact) | ± 25 | KV |
| P_{PP} | Peak Pulse Power | $t_p = 8/20 \mu\text{s}$ | 50 | W |
| I_{PP} | Rated Peak Pulse Current | $t_p = 8/20 \mu\text{s}$ | 5.0 | A |
| T_J | Operating JunctionTemperature Range | — | -55 to +125 | °C |
| T_{stg} | Storage Temperature Range | — | -55 to +150 | °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 @ V_{RWM} |
| V_{RWM} | Peak Reverse Working Voltage |
| P_{PP} | Peak Pulse Power Dissipation |
| C_J | Junction Capacitance @ $V_r=0\text{V}, f=1\text{MHz}$ |



DFN1006

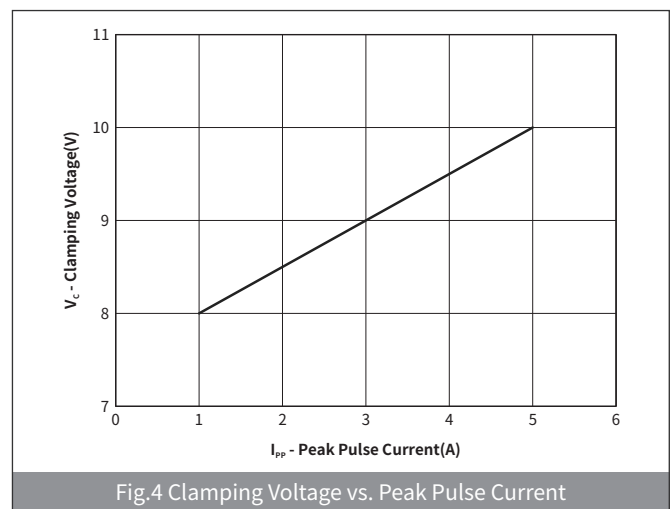
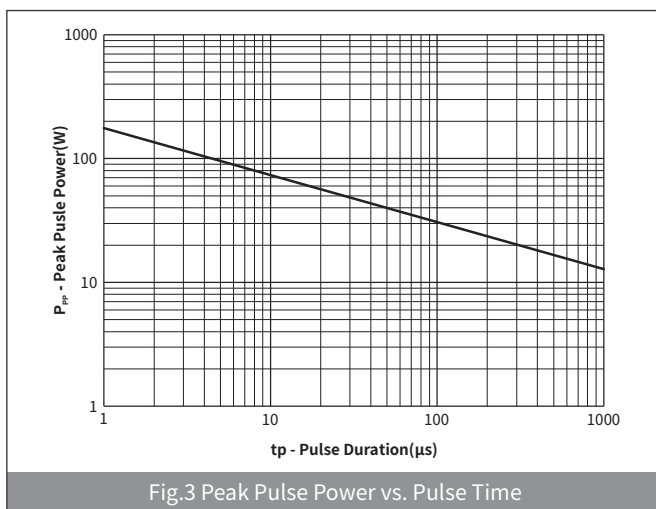
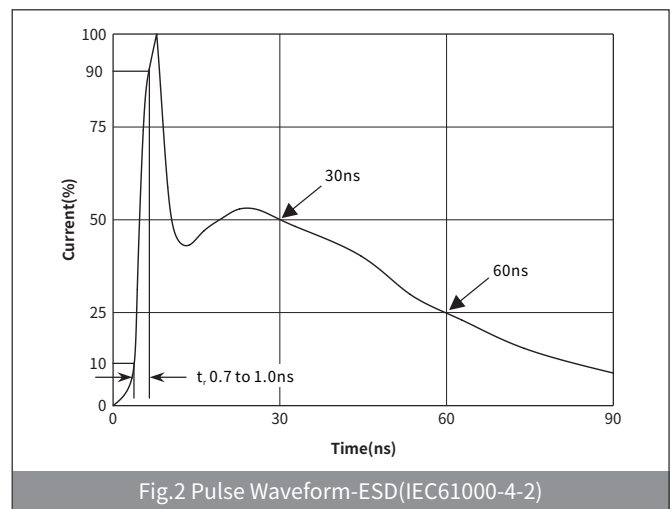
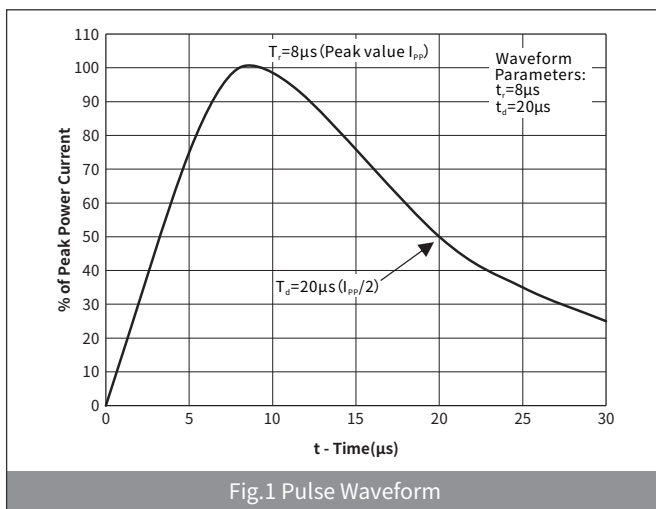


Electrical Characteristics ($T_A=25^\circ\text{C}$ Unless otherwise specified)

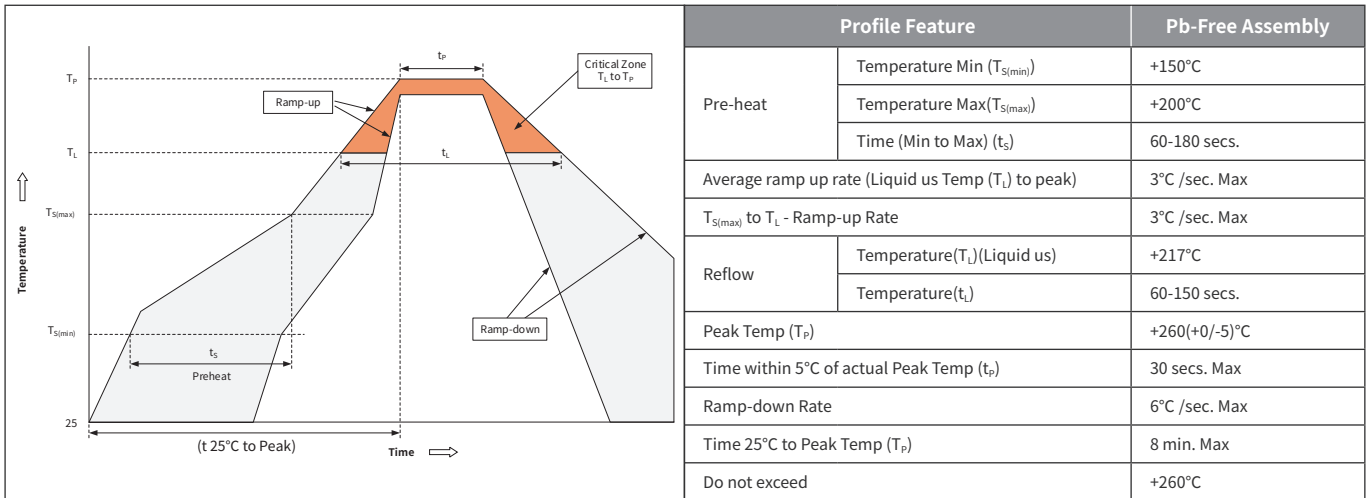
| PARAMETER | SYMBOL | CONDITION | MIN. | TYP. | MAX. | UNIT |
|------------------------------|-----------|---|------|------|------|---------------|
| Peak Reverse Working Voltage | V_{RWM} | $T_A=25^\circ\text{C}$ | — | — | 5.0 | V |
| Breakdown Voltage | V_{BR} | $I_T=1\text{mA}; T_A=25^\circ\text{C}$ | 5.6 | 6.5 | 8.0 | V |
| Reverse Leakage Current | I_R | $V_{RWM}=5.0\text{V}; T_A=25^\circ\text{C}$ | — | — | 0.1 | μA |
| Clamping Voltage | V_C | $I_{PP}=1.0\text{A}, t_p=8/20\mu\text{s}$ | — | — | 8.0 | V |
| | | $I_{PP}=5.0\text{A}, t_p=8/20\mu\text{s}$ | — | — | 10.0 | V |
| Junction Capacitance | C_J | $V_R=0\text{V}, f=1\text{MHz}$ | — | 15 | 18 | pF |

Ordering Information

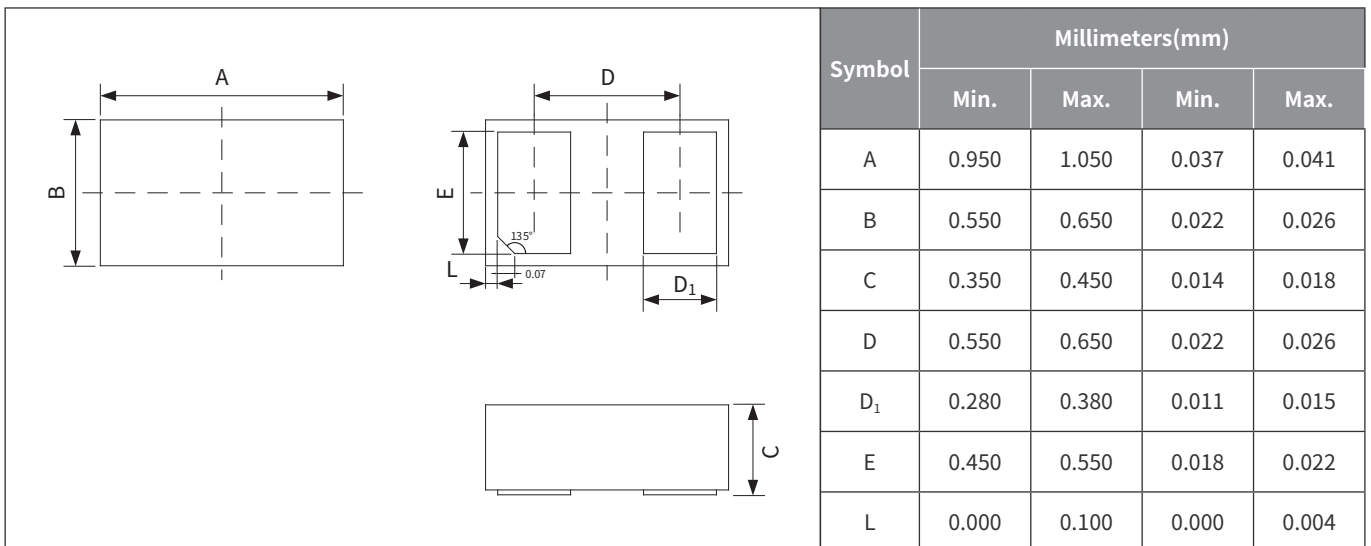
| PREFERRED P/N | PACKAGE | SIZE(mm) | DELIVERY MODE | MPQ(PCS) |
|---------------|---------|----------------|---------------|----------|
| H5VL10B | DFN1006 | 1.00×0.60×0.37 | 7" REEL | 10,000 |

Ratings And Characteristics Curves ($T_A=25^\circ\text{C}$ Unless otherwise specified)


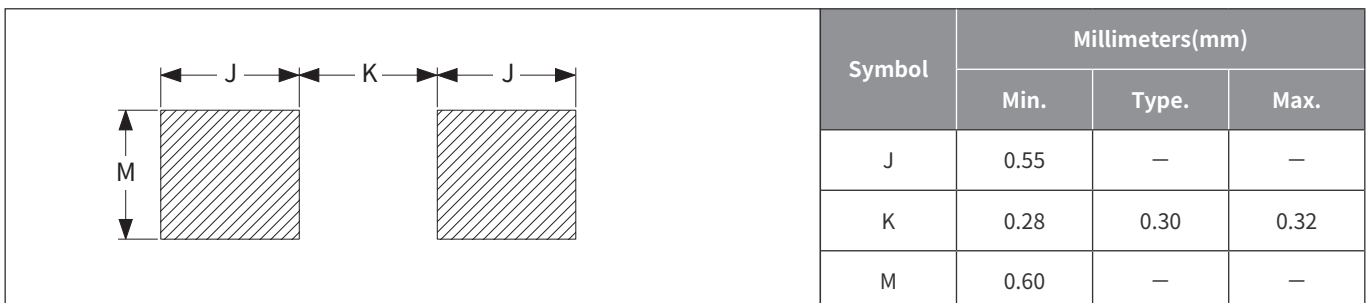
▶ Recommended Soldering Conditions



▶ Package Outline Dimensions (DFN1006)



▶ Suggested Pad Layout



Note :

This soldering footprint is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.