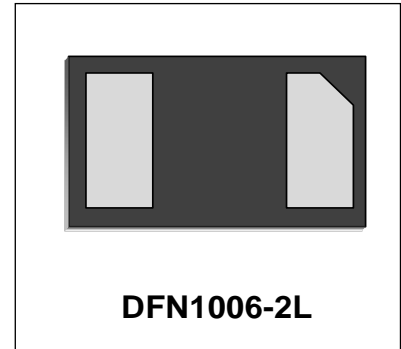


Features

- Protects one I/O or Power Line
- Low Clamping Voltage
- Working Voltage: 3.3V
- Low Leakage Current
- Response Time is Typically < 1 ns



IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 (ESD) $\pm 30\text{kV}$ (air), $\pm 30\text{kV}$ (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 7A (8/20 μs)

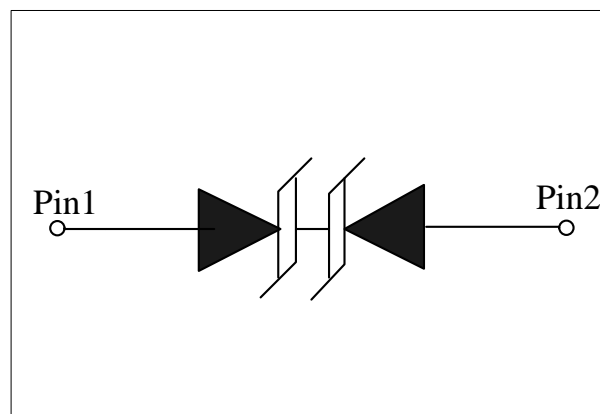
Mechanical Characteristics

- DFN1006-2L package
- Molding compound flammability rating:
UL 94V-0
- Marking : Marking Code
- RoHS Compliant

Applications

- Cellular Handsets & Accessories
- Personal Digital Assistants (PDAs)
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras
- MP3 Players

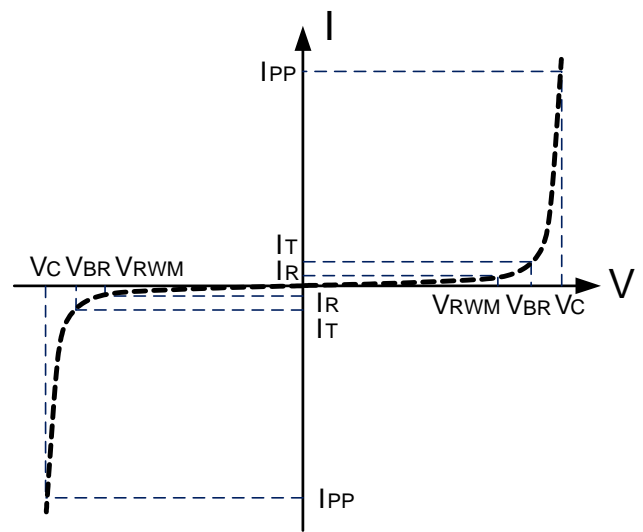
Schematic & PIN Configuration



| Absolute Maximum Rating | | | |
|--|-----------|--------------|-------|
| Rating | Symbol | Value | Units |
| Peak Pulse Power ($t_p = 8/20\mu s$) | P_{PP} | 100 | Watts |
| Operating Temperature | T_J | -55 to + 125 | °C |
| Storage Temperature | T_{STG} | -55 to +150 | °C |

Electrical Parameters (T=25°C)

| Symbol | Parameter |
|-----------|---|
| I_{PP} | Maximum Reverse Peak Pulse Current |
| V_C | Clamping Voltage @ I_{PP} |
| V_{RWM} | Working Peak Reverse Voltage |
| I_R | Maximum Reverse Leakage Current @ V_{RWM} |
| V_{BR} | Breakdown Voltage @ I_T |
| I_T | Test Current |



Electrical Characteristics

| DW3.3DF-B-01-E | | | | | | |
|---------------------------|-----------|------------------------------|---------|---------|---------|---------|
| Parameter | Symbol | Conditions | Minimum | Typical | Maximum | Units |
| Reverse Stand-Off Voltage | V_{RWM} | | | | 3.3 | V |
| Reverse Breakdown Voltage | V_{BR} | $I_T=1mA$ | 3.7 | | | V |
| Reverse Leakage Current | I_R | $V_{RWM}=3.3V, T=25^\circ C$ | | | 0.5 | μA |
| Peak Pulse Current | I_{PP} | $t_p=8/20\mu s$ | | | 7 | A |
| Clamping Voltage | V_C | $I_{PP}=1A, t_p=8/20\mu s$ | | | 6 | V |
| Clamping Voltage | V_C | $I_{PP}=7A, t_p=8/20\mu s$ | | 9 | 11 | V |
| Junction Capacitance | C_j | $V_R=0V, f=1MHz$ | | 10 | | pF |

Typical Characteristics

Figure 1: Peak Pulse Power Vs Pulse Time

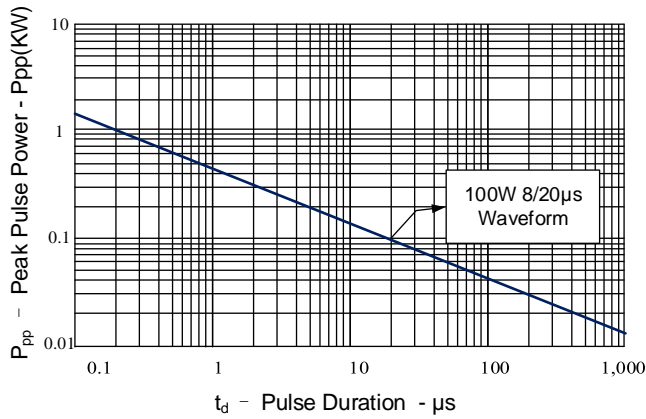


Figure 2: Power Derating Curve

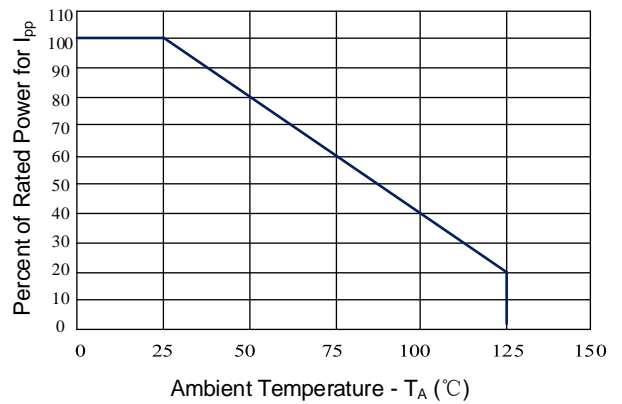


Figure 3: Clamping Voltage vs. Peak Pulse Current

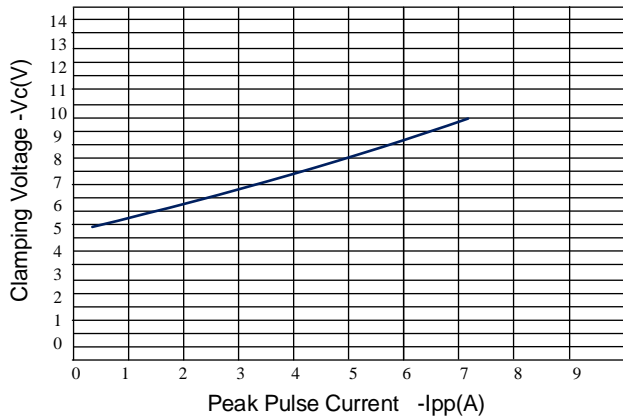


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage

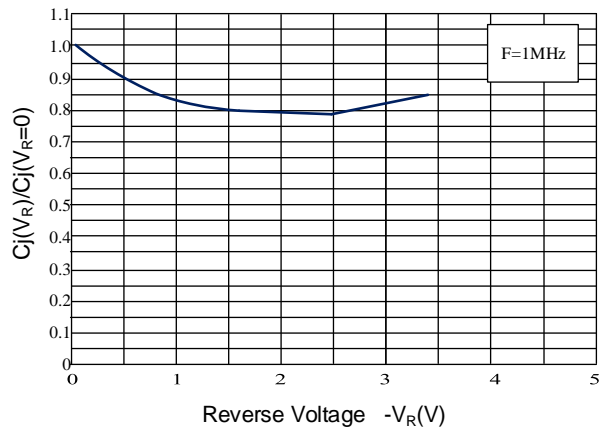


Figure 5: Pulse Waveform

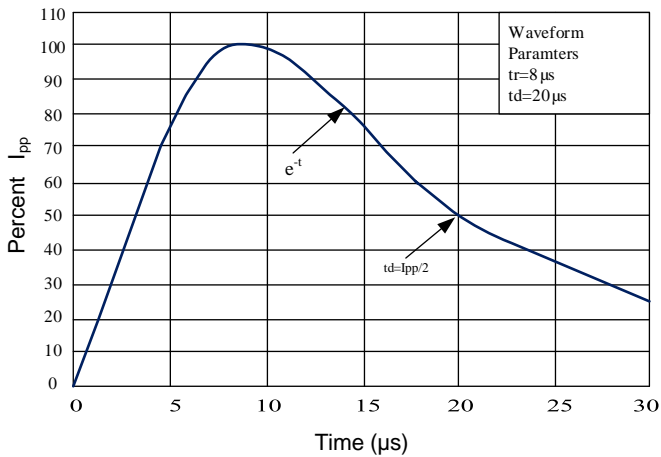
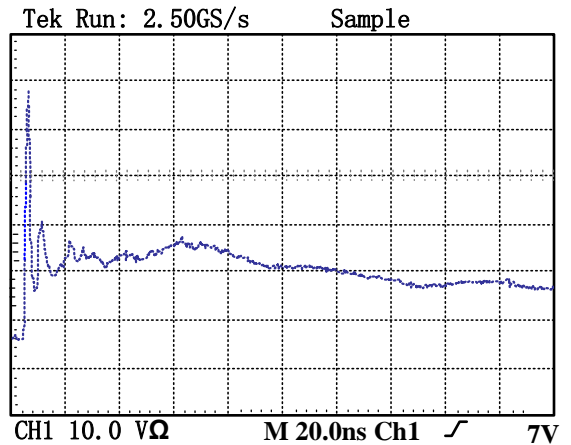
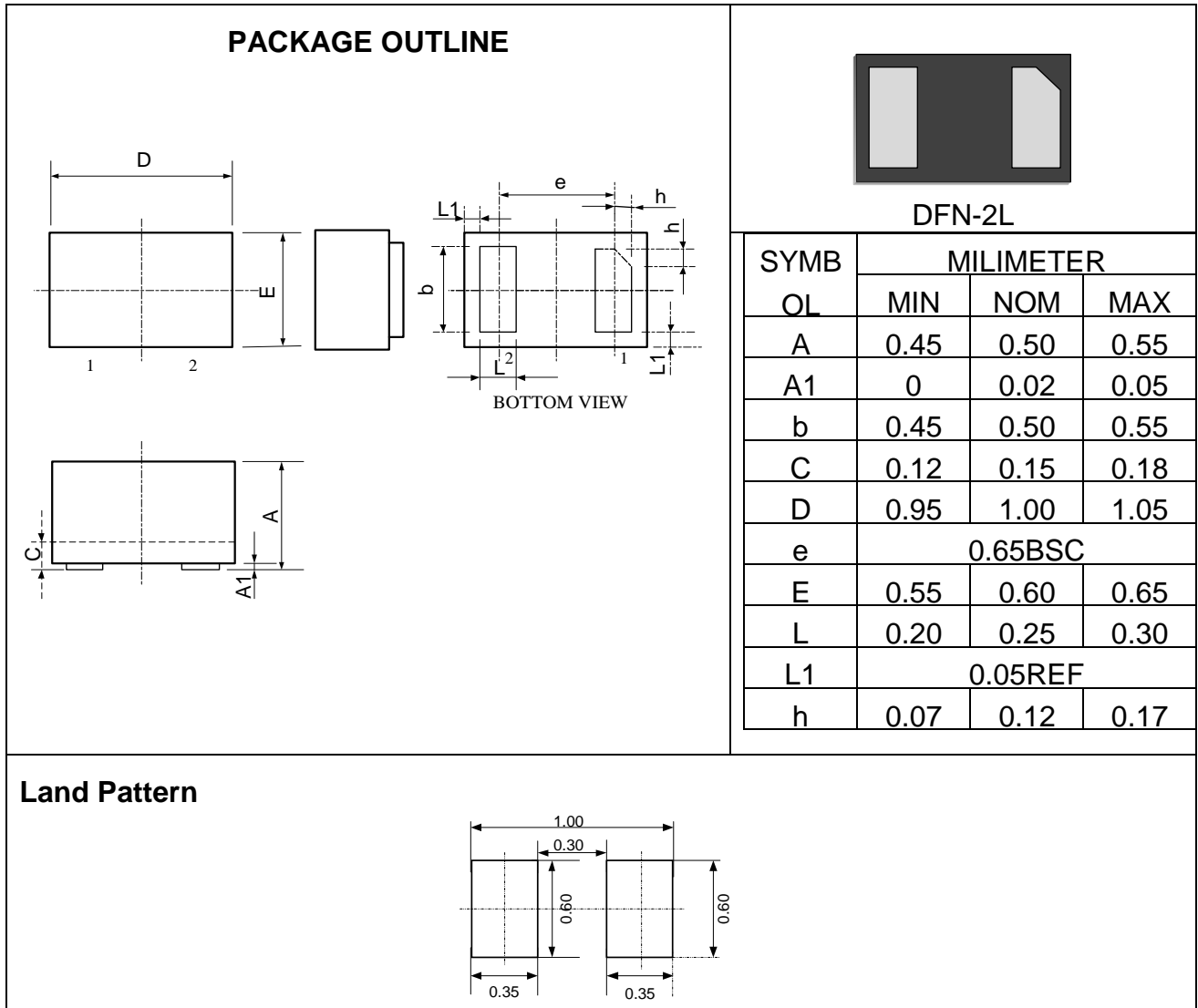


Figure 6: ESD Clamping(8kV Contact per IEC 61000-4-2)



Outline Drawing –DFN-2L



Marking Codes

| | | | |
|-------------|----------------|--------------|----|
| Part Number | DW3.3DF-B-01-E | Marking Code | 3B |
|-------------|----------------|--------------|----|

Package Information

Qty: 10k/Reel