

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

| Characteristic | Symbol | Value | Unit | Conditions |
|------------------------------------|--------------------------|-------|------|------------------------|
| Peak Pulse Power Dissipation | P_PP | 90 | W | 8/20µs, Per Figure 3 |
| Peak Pulse Current | Ipp | 2 | Α | 8/20µs, Per Figure 3 |
| ESD Protection – Contact Discharge | V _{ESD_Contact} | ±20 | kV | IEC 61000-4-2 Standard |
| ESD Protection – Air Discharge | V_{ESD_Air} | ±20 | kV | IEC 61000-4-2 Standard |

Thermal Characteristics

| Characteristic | Symbol | Value | Unit |
|--|-----------------------------------|-------------|------|
| Package Power Dissipation (Note 5) | P_{D} | 250 | mW |
| Thermal Resistance, Junction to Ambient (Note 5) | $R_{	hetaJA}$ | 500 | °C/W |
| Operating and Storage Temperature Range | T _J , T _{STG} | -65 to +150 | °C |

Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

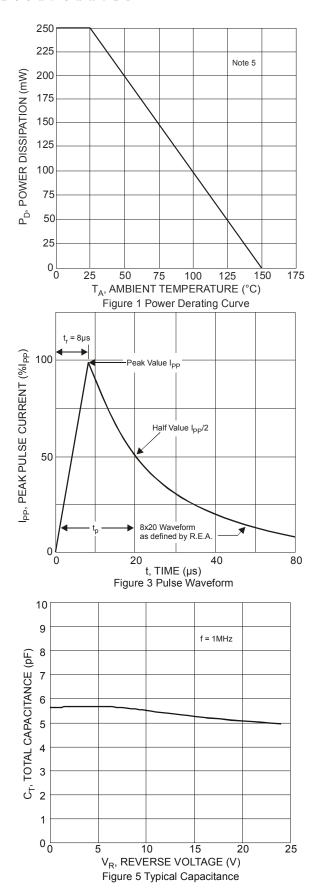
| Characteristic | Symbol | Min | Тур | Max | Unit | Test Conditions |
|---------------------------------------|------------------|-----|-----|-----|------|------------------------------------|
| Reverse Standoff Voltage | V _{RWM} | _ | _ | 24 | V | _ |
| Channel Leakage Current (Note 6) | I _{RM} | _ | _ | 100 | nA | V _{RWM} = 24V |
| Clamping Voltage, Positive Transients | ., | _ | _ | 42 | V | $I_{PP} = 1A$, $t_p = 8/20 \mu S$ |
| | V _{CL} | _ | _ | 46 | V | $I_{PP} = 2A, t_p = 8/20\mu S$ |
| Breakdown Voltage | V _{BR} | 26 | _ | 32 | V | I _R = 1mA |
| Channel Input Capacitance | Ст | _ | 6 | 10 | pF | V _R = 0V, f = 1MHz |

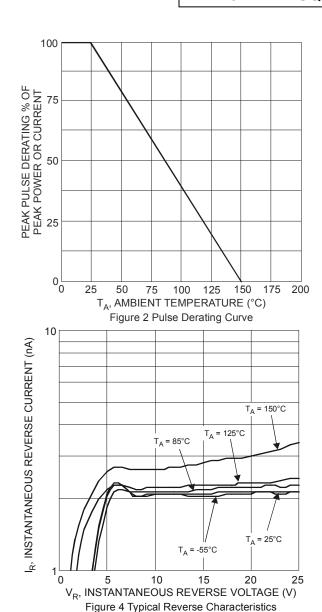
Notes:

^{5.} Device mounted on FR-4 PCB pad layout (2oz copper) as shown on Diodes, Inc. suggested pad layout, which can be found on our website at http://www.diodes.com/package-outlines.html.

^{6.} Short duration pulse test used to minimize self-heating effect.





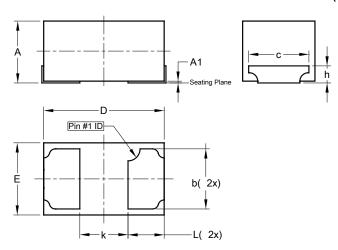




Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.

U-DFN1006-2 (SWP)

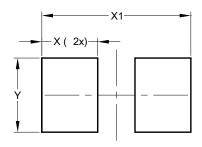


| U-DFN1006-2/SWP | | | | |
|----------------------|----------|------|------|--|
| Dim | Min | Max | Тур | |
| Α | 0.47 | 0.53 | 0.50 | |
| A1 | 0.0 | 0.05 | 0.03 | |
| b | 0.45 | 0.55 | 0.50 | |
| С | 0.55 REF | | | |
| D | 0.95 | 1.05 | 1.00 | |
| Е | 0.55 | 0.65 | 0.60 | |
| h | 0.17 REF | | | |
| k | 0.37 REF | | | |
| L | 0.25 | 0.35 | 0.30 | |
| All Dimensions in mm | | | | |

Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.

U-DFN1006-2 (SWP)



| Dimensions | Value (in mm) |
|------------|---------------|
| Χ | 0.45 |
| X1 | 1.20 |
| Υ | 0.60 |



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