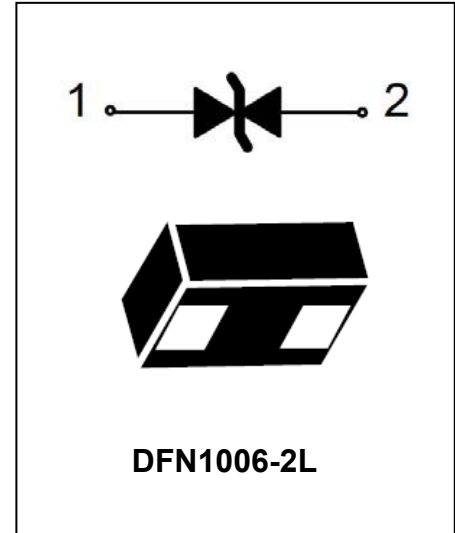


## Features

- ◆ low Capacitance 12pF
- ◆ Low Clamping Voltage
- ◆ Small Body Outline Dimensions: 0.039" x 0.024"  
(1.0 mm x 0.60 mm)
- ◆ Low Body Height: 0.019" (0.5 mm)
- ◆ Stand-off Voltage: 7.0V
- ◆ Low Leakage
- ◆ Response Time is Typically < 1 ns
- ◆ IEC61000-4-2 Level 4 ESD Protection for data lines
- ◆ These are Pb-Free Devices



## Applications

- ◆ 10/100/1000 Mbits/s Ethernet
- ◆ FireWire
- ◆ Display ports
- ◆ MDDI ports
- ◆ Digital Visual Interface (DVI)
- ◆ Cellular handsets & accessories
- ◆ Computer and peripherals

## Maximum Rating @ Ta=25°C unless otherwise specified

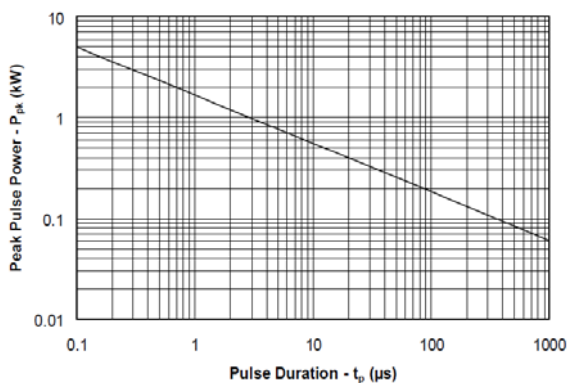
| Symbol           | Parameter                  |         | Ratings     | Units |
|------------------|----------------------------|---------|-------------|-------|
| ESD              | IEC 61000-4-2 (HBM-ESD)    | Contact | 8           | KV    |
|                  |                            | Air     | 15          |       |
| T <sub>L</sub>   | Lead Soldering Temperature |         | 260(10sec.) | °C    |
| T <sub>J</sub>   | Operating Temperature      |         | -55 to +125 | °C    |
| T <sub>STG</sub> | Storage Temperature        |         | -55 to +150 | °C    |

## Electrical Characteristics@ Ta=25°C unless otherwise

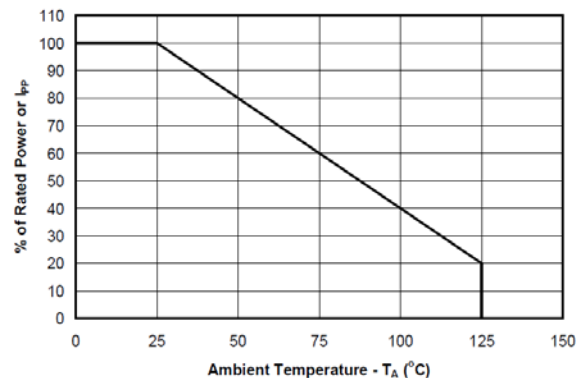
| Parameter | Marking | VRWM @IR |     | VBR@ImA | VC@1A | VC@IPP |   | CJ  |
|-----------|---------|----------|-----|---------|-------|--------|---|-----|
|           |         | V        | μA  | V       | V     | V      | A | pF  |
|           |         |          | MAX | MIN     | MAX   | MAX    |   | TYP |
| ZX0711P   |         | 7        | 1   | 7.5     | 14    | 19.6   | 5 | 12  |

## Typical Characteristics@ Ta=25°C unless otherwise specified

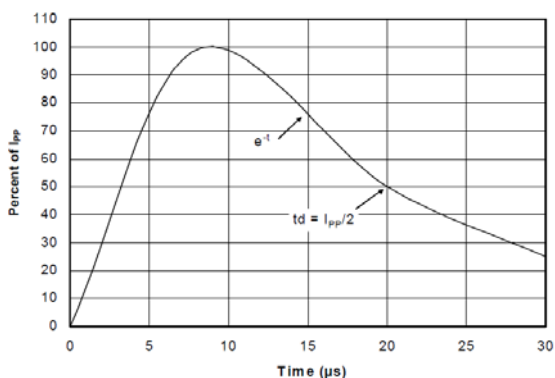
**Non-Repetitive Peak Pulse Power vs. Pulse Time**



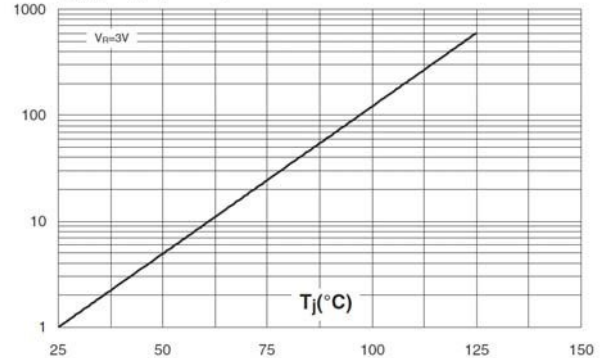
**Power Derating Curve**



**Pulse Waveform**

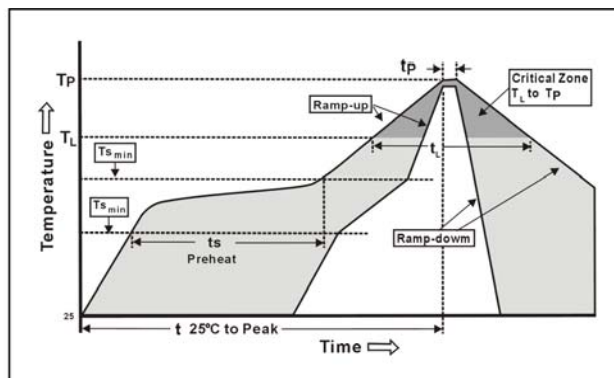


**I<sub>R</sub>[T<sub>j</sub>] / I<sub>R</sub>[T<sub>j</sub>=25°C]**



## Soldering Parameters

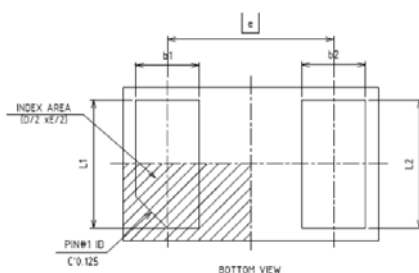
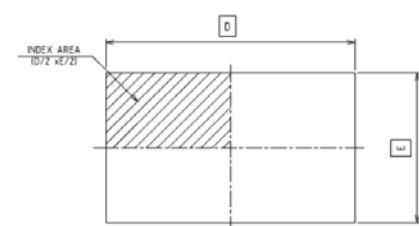
| Reflow Condition                                       |                                           | Fb – Free assembly      |
|--------------------------------------------------------|-------------------------------------------|-------------------------|
| Pre Heat                                               | - Temperature Min ( $T_{s(\text{Min})}$ ) | 150°C                   |
|                                                        | - Temperature Max ( $T_{s(\text{Max})}$ ) | 200°C                   |
|                                                        | - Time (Min to max) ( $t_s$ )             | 60 – 180 secs           |
| Average ramp up rate (Liquidus) Temp ( $T_L$ ) to peak |                                           | 3°C/second Max          |
| $T_{s(\text{Max})}$ to $T_L$ - Ramp-up Rate            |                                           | 3°C/second Max          |
| Reflow                                                 | - Temperature ( $T_L$ ) (Liquidus)        | 217°C                   |
|                                                        | - Temperature ( $t_L$ )                   | 60 – 150 seconds        |
| Peak Temperature ( $T_p$ )                             |                                           | 250 <sup>+0/-5</sup> °C |
| Time within 5°C of actual peak Temperature ( $t_p$ )   |                                           | 20 – 40 seconds         |
| Ramp-down Rate                                         |                                           | 6°C/second Max          |
| Time 25°C to peak Temperature ( $T_p$ )                |                                           | 8 minutes Max.          |
| Do not exceed                                          |                                           | 260°C                   |



## Package Outline

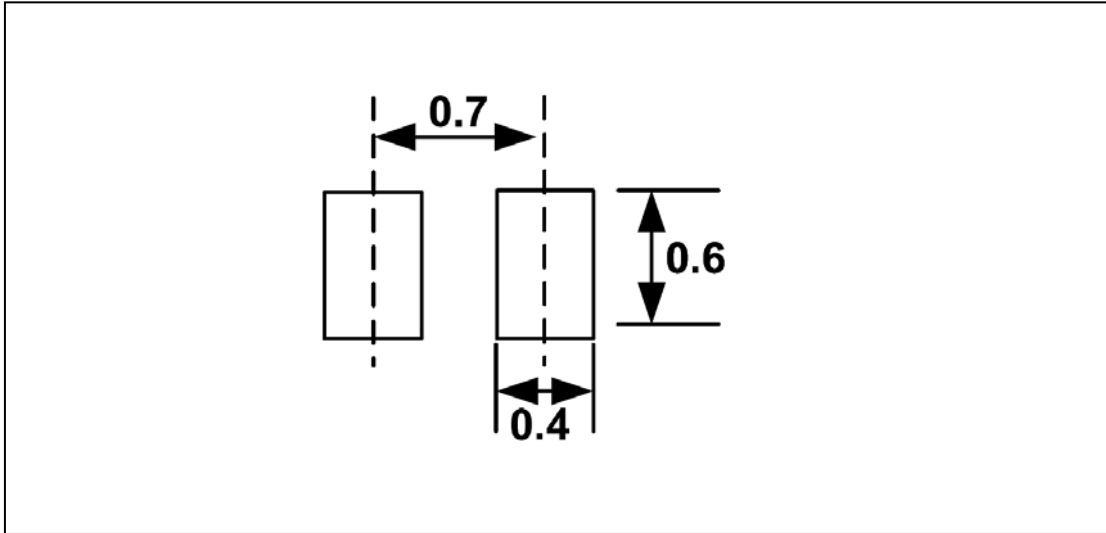
Plastic surface mounted package

DFN 1006-2L



| Symbol | Dimensions in mm |       |       |
|--------|------------------|-------|-------|
|        | Min              | Nom   | Max   |
| A      | 0.450            | 0.500 | 0.550 |
| A1     | 0.000            | 0.002 | 0.050 |
| D      | 0.950            | 1.000 | 1.050 |
| E      | 0.550            | 0.600 | 0.650 |
| e      |                  | 0.650 |       |
| b1     | 0.200            | 0.250 | 0.300 |
| b2     | 0.200            | 0.250 | 0.300 |
| L1     | 0.450            | 0.500 | 0.550 |
| L2     | 0.450            | 0.500 | 0.550 |

## Soldering Footprint



## Package And Marking Information

| Device  | Package    | Shipping | Reel Size |
|---------|------------|----------|-----------|
| ZX0711P | DFN1006-2L | 10K/Reel | 7 inch    |