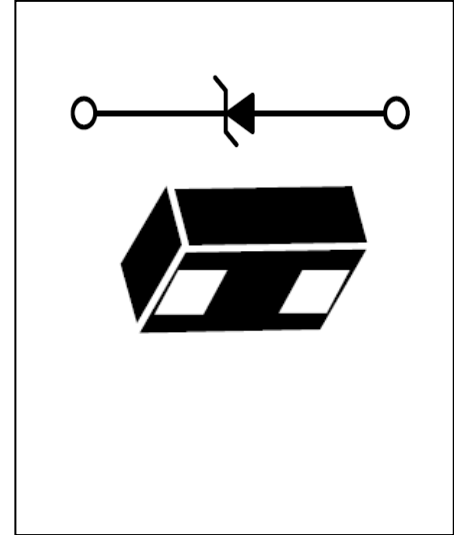


Features

- ◆ 500 Watts peak pulse power ($t_p = 8/20\mu s$)
- ◆ 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



Applications

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

Maximum Rating @ $T_a = 25^\circ C$ unless otherwise specified

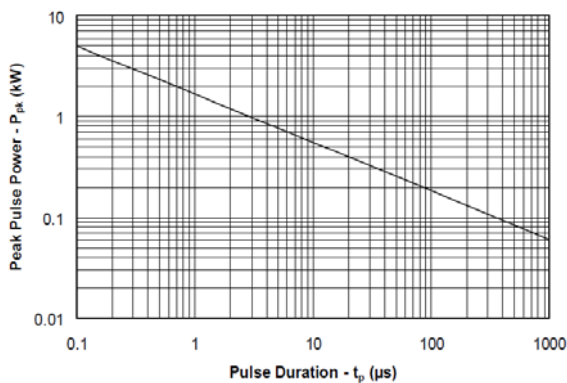
Symbol	Parameter		Ratings	Units
ESD	IEC 61000-4-2 (HBM-ESD)	Contact	8	KV
		Air	15	
T_L	Lead Soldering Temperature		260(10sec.)	$^\circ C$
T_J	Operating Temperature		-55 to +125	$^\circ C$
T_{STG}	Storage Temperature		-55 to +150	$^\circ C$

Electrical Characteristics@ Ta=25°C unless otherwise

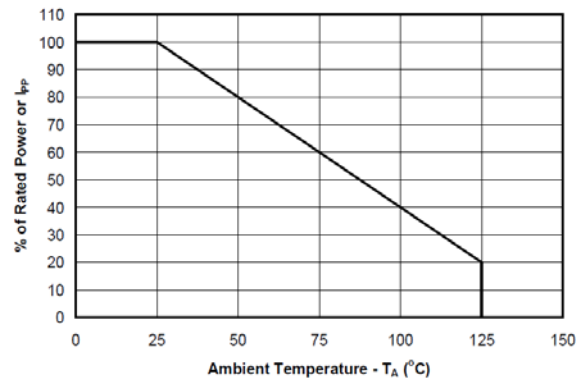
Parameter	Marking	VRWM @IR		VBR@ImA	VC@1A	VC@IPP		CJ
		V	μA	V	V	V	A	pF
			MAX	MIN	MAX	MAX		MAX
ZX0701M		7	1	7.2	11.8	13.6	38	180

Typical Characteristics@ Ta=25°C unless otherwise specified

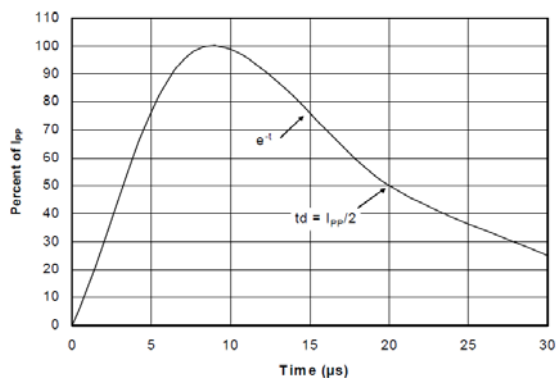
Non-Repetitive Peak Pulse Power vs. Pulse Time



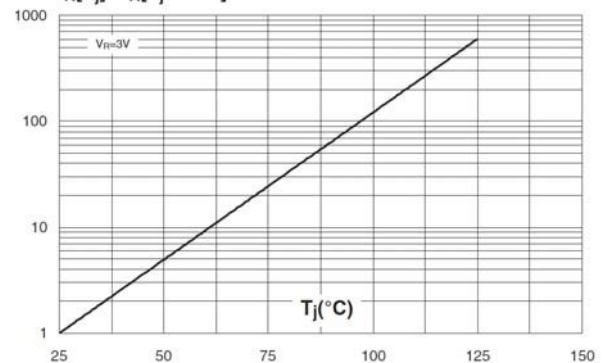
Power Derating Curve



Pulse Waveform

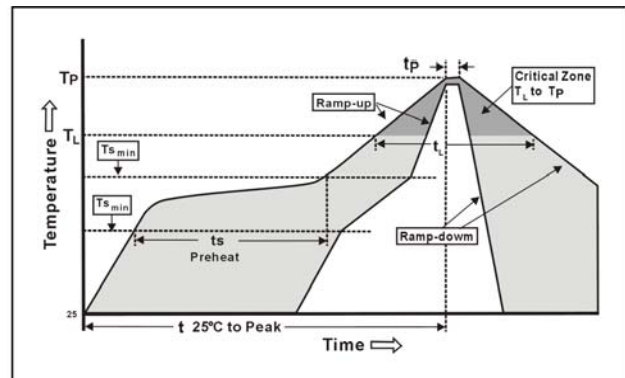


$I_R[T_J] / I_R[T_J=25^\circ\text{C}]$



Soldering Parameters

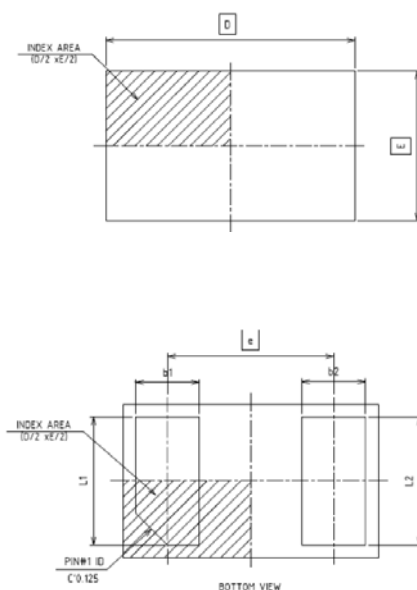
Reflow Condition		Fb – Free assembly
Pre Heat	- Temperature Min ($T_{s(\text{Min})}$)	150°C
	- Temperature Max ($T_{s(\text{Max})}$)	200°C
	- Time (Min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus) Temp (T_L) to peak		3°C/second Max
$T_{s(\text{Max})}$ to T_L - Ramp-up Rate		3°C/second Max
Reflow	- Temperature (T_L) (Liquidus)	217°C
	- Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_p)		250 ^{+0/-5} °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

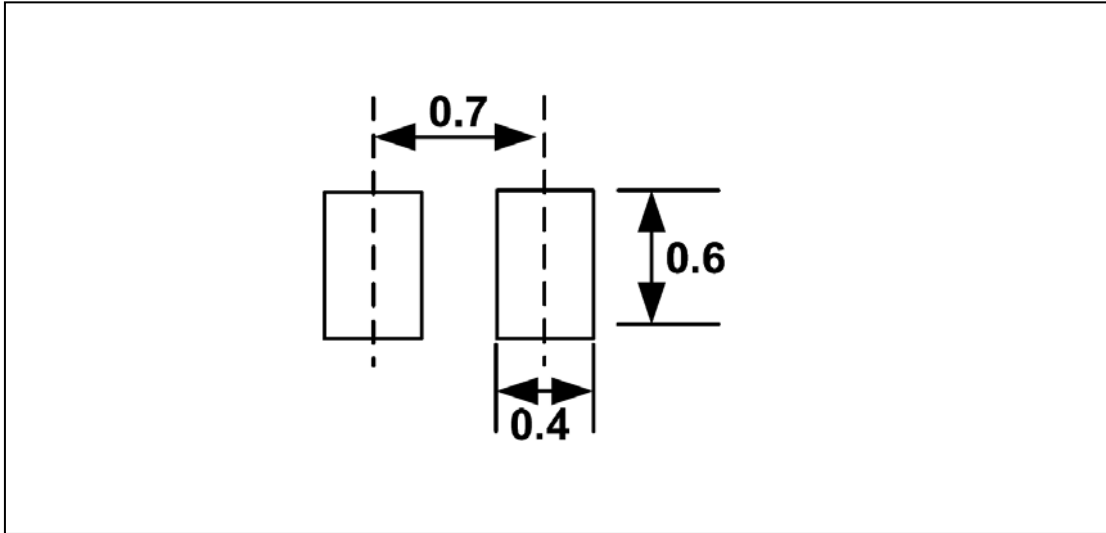
Plastic surface mounted package

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
ZX0701M	DFN1006-2L	10K/Reel	7 inch