

Features

- low Capacitance 30pF
- Low Clamping Voltage
- Small Body Outline Dimensions: 0.039" x 0.024" (1.0mmx0.60mm)
- Low Body Height: 0.019" (0.5 mm)
- Stand-off Voltage: 12V
- Low Leakage
- Response Time is Typically < 1 ns
- IEC61000-4-2 Level 4 ESD Protection for data lines
- These are Pb-Free Devices



DFN1006-2L



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

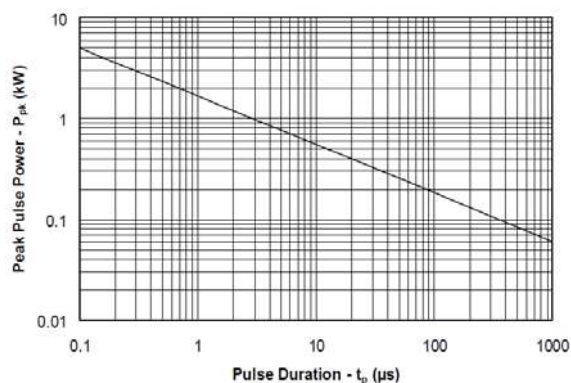
Symbol	Parameter		Ratings	Units
ESD	IEC 61000-4-2 (HBM-ESD)	Contact	8	KV
		Air	15	
T _L	Lead Soldering Temperature		260(10sec.)	°C
T _J	Operating Temperature		-55 to +125	°C
T _{STG}	Storage Temperature		-55 to +150	°C

Electrical Characteristics@ Ta=25°C unless otherwise

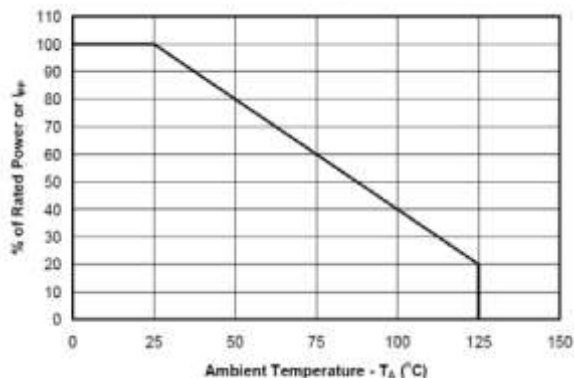
Parameter	VRWM @IR		VBR@ImA	VC@1A	VC@IPP		CJ
	V	μA	V	V	V	A	pF
		MAX	MIN	MAX	MAX		MAX
PESDNC2FD12VB	12	1	13.5	19.6	25	5	30

Typical Characteristics@ Ta=25°C unless otherwise specified

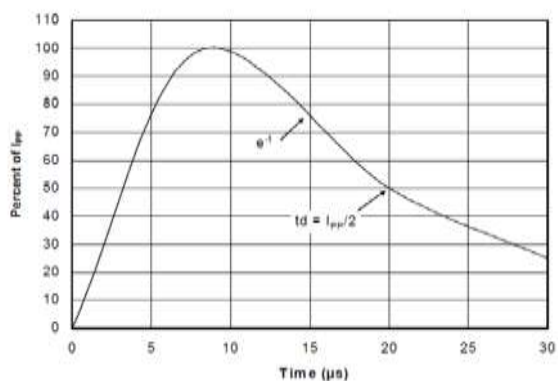
Non-Repetitive Peak Pulse Power vs. Pulse Time



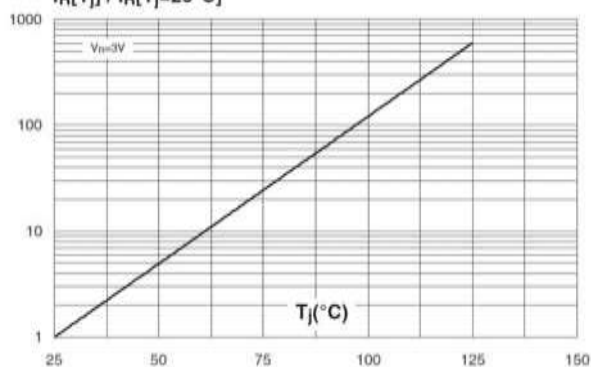
Power Derating Curve



Pulse Waveform

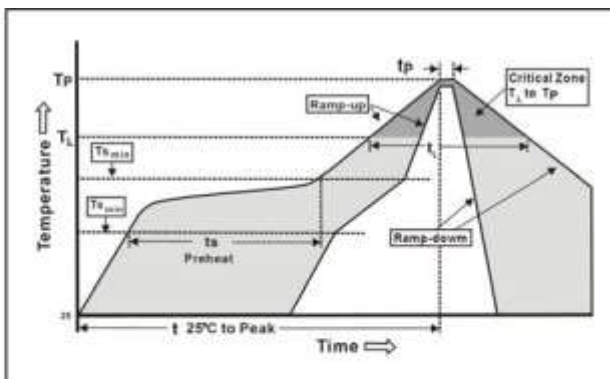


$I_R[T_J] / I_R[T_J=25^\circ\text{C}]$

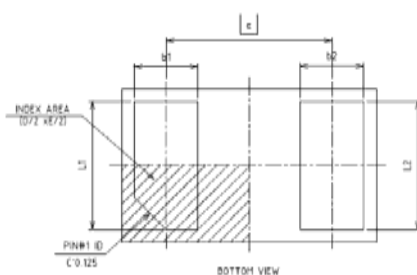
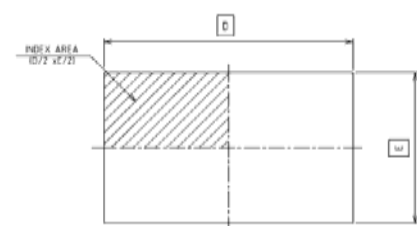


Soldering Parameters

Reflow Condition		Fb – Free assembly
Pre Heat	- Temperature Min ($T_{s(Min)}$)	150°C
	- Temperature Max ($T_{s(Max)}$)	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
$T_{s(Max)}$ 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



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

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