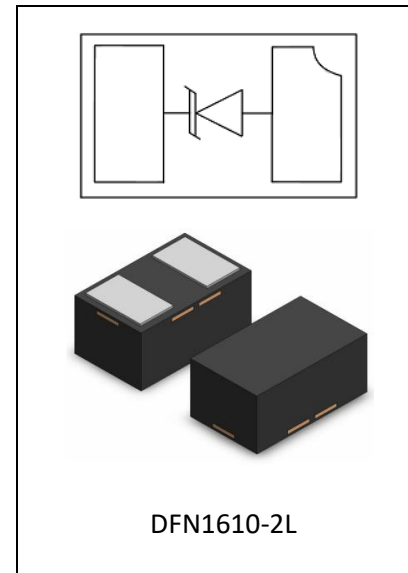


Features

- ◆ 1800 Watts peak pulse power ($t_p = 8/20\mu s$)
- ◆ Transient protection for high speed data lines to IEC 61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact)
IEC 61000-4-4 (EFT) 40A(5/50ns)
- ◆ Protects One Power or I/O Port
- ◆ Low leakage current
- ◆ Low operating and clamping voltages
- ◆ Solid-state silicon avalanche technology



Applications

- ◆ Cell Phone Handsets and Accessories
- ◆ Microprocessor based equipment
- ◆ Portable Instrumentation
- ◆ Personal Digital Assistant (PDA)

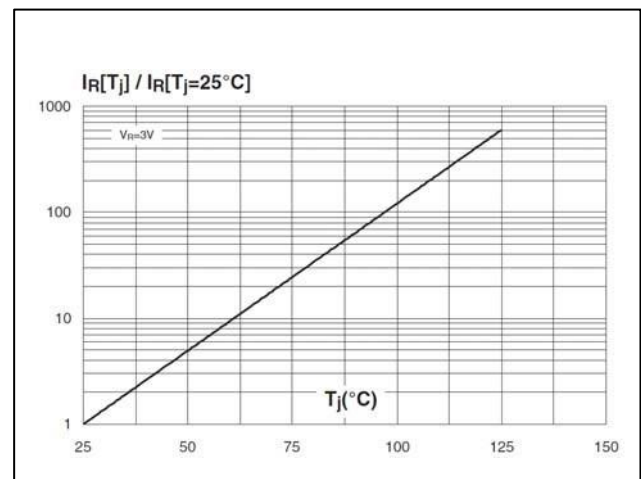
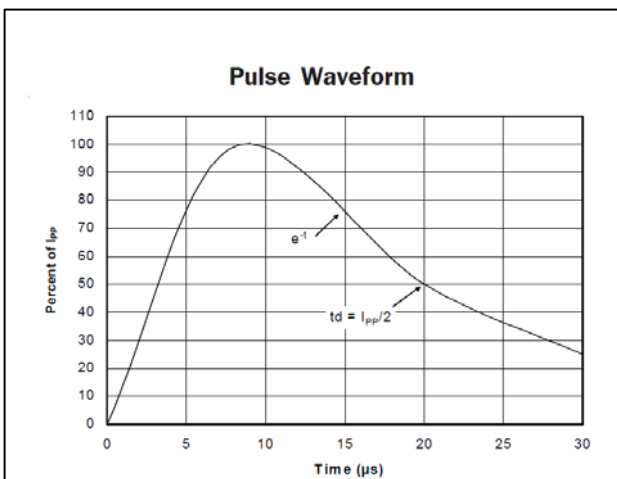
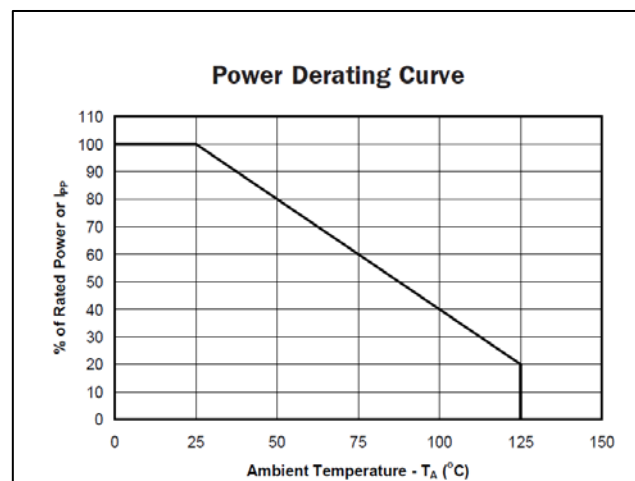
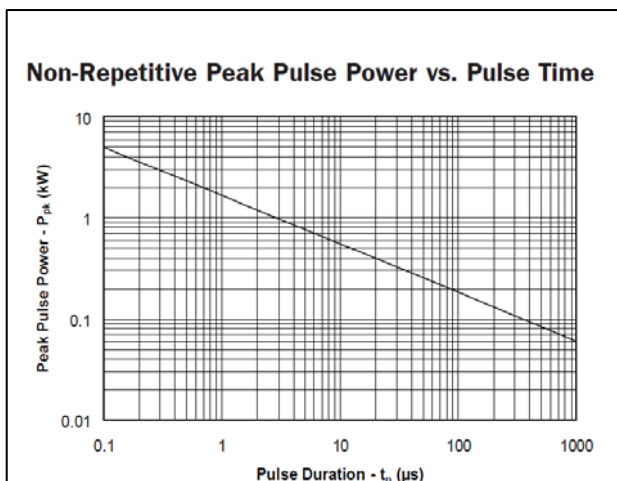
Maximum Rating @ $T_a = 25^\circ C$ unless otherwise specified

Symbol	Parameter	Ratings	Units
P_{PK}	Peak Pulse Power ($t_p = 8/20\mu s$)	1800	Watts
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

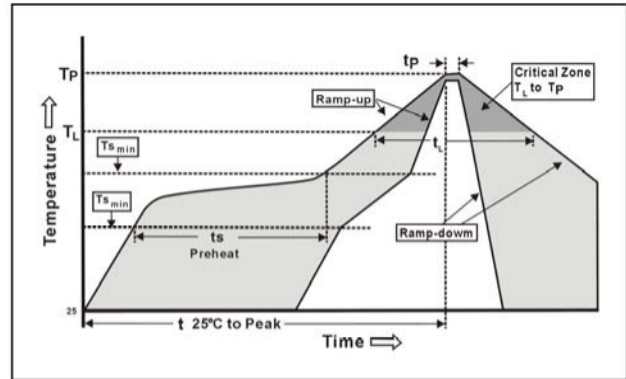
Parameter	VRWM @IR		VBR@ImA	VC@1A	VC@IPP		CJ
	V	μA	V	V	V	A	pF
		MAX	MIN	MAX	MAX		TYP
ESD2EN12V	12	1	13.3	18	25	70	400

Typical Characteristics@ Ta=25°C unless otherwise specified



Soldering Parameters

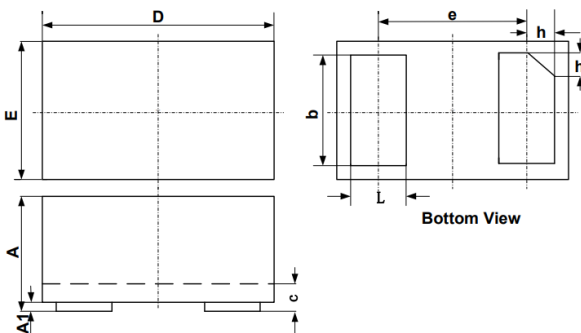
Reflow Condition		Fb – Free assembly
Pre Heat	- Temperature Min ($T_{s(Min)}$)	150°C
	- Temperature Max ($T_{s(Max)}$)	200°C
	- Time (Min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus) Temp (T_L) to peak		3°C/second Max
$T_{s(Max)}$ to T_L - Ramp-up Rate		3°C/second Max
Reflow	- Temperature (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

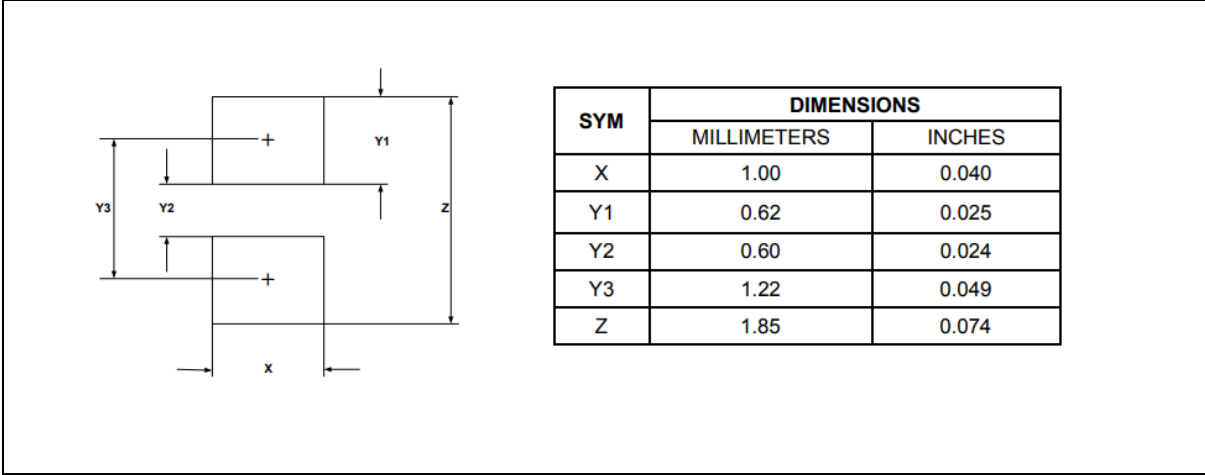
Plastic surface mounted package

DFN1610



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.45	0.50	0.55	0.018	0.020	0.022
A1	0.00	0.02	0.05	0.000	0.001	0.002
b	0.75	0.80	0.85	0.030	0.032	0.034
c	0.10	0.15	0.20	0.004	0.006	0.008
D	1.55	1.60	1.65	0.062	0.064	0.066
e	1.10 BSC			0.044 BSC		
E	0.95	1.00	1.05	0.038	0.040	0.042
L	0.35	0.40	0.45	0.014	0.016	0.018
h	0.15	0.20	0.25	0.006	0.008	0.010

Soldering Footprint



Package And Marking Information

Device	Package	Shipping	Reel Size
ESD2EN12V	DFN1610-2	3000/Reel	7 inch