

Features

- 80Wattspeakpulsepower($t_p=8/20\mu s$)
- Protect up to 2-lines
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Lowcapacitance($C_j=0.3pF_{typ.I/OtoI/O}$)
- IEC 61000-4-2 $\pm 8kV$ contact $\pm 15kV$ air
- IEC 61000-4-4 (EFT) 40A(5/50ns)
- IEC61000-4-5(Lightning)3.0A(8/20 μs)

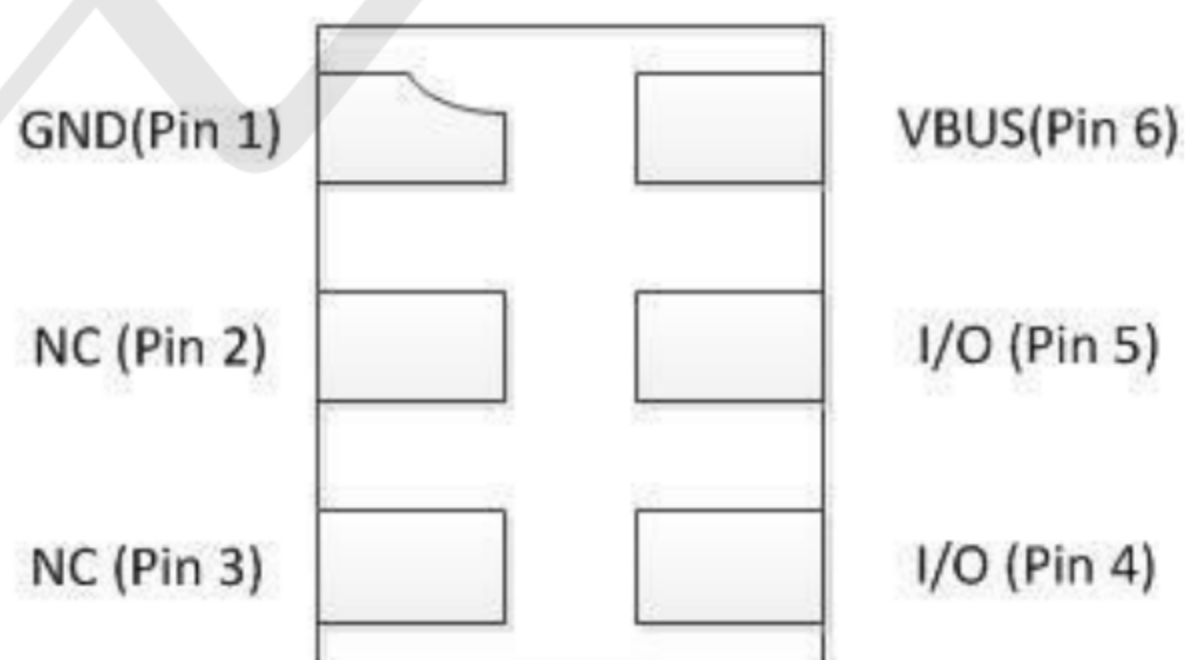
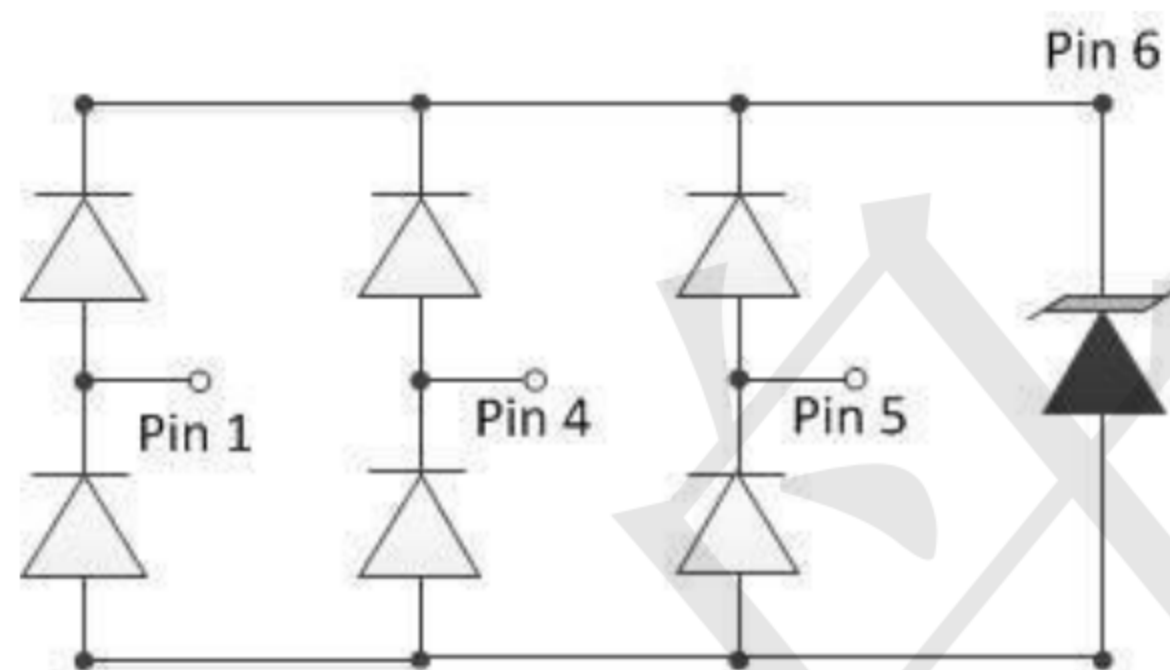
Mechanical Data

- DFN1109-6L package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

Application

- USB 2.0
- MMC Port
- Video Port
- Digital visual interface

Schematic&PIN Configuration



Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu\text{s}$)	P_{PP}	80	Watts
Peak Pulse Current ($t_p=8/20\mu\text{s}$)(note1)	I_{pp}	3.0	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2(Contact)	V_{ESD}	15 8	kV
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}\text{C}$
Junction Temperature	T_J	-55 to + 125	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55 to + 125	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	6.0			V
Reverse Leakage Current	I_R	$V_{RWM}=5\text{V}, T=25^{\circ}\text{C}$		0.1	0.5	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu\text{s}$			3.5	A
Clamping Voltage	V_C	$I_{PP}=3.5\text{A}, t_p=8/20\mu\text{s}$			20	V
Junction Capacitance	C_j	$V_R=0\text{V}, f=1\text{MHz}$ I/O to I/O		0.3		pF
		$V_R=0\text{V}, f=1\text{MHz}$ I/O to GND			0.6	pF

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

Fig1. 8/20 μs Pulse Waveform

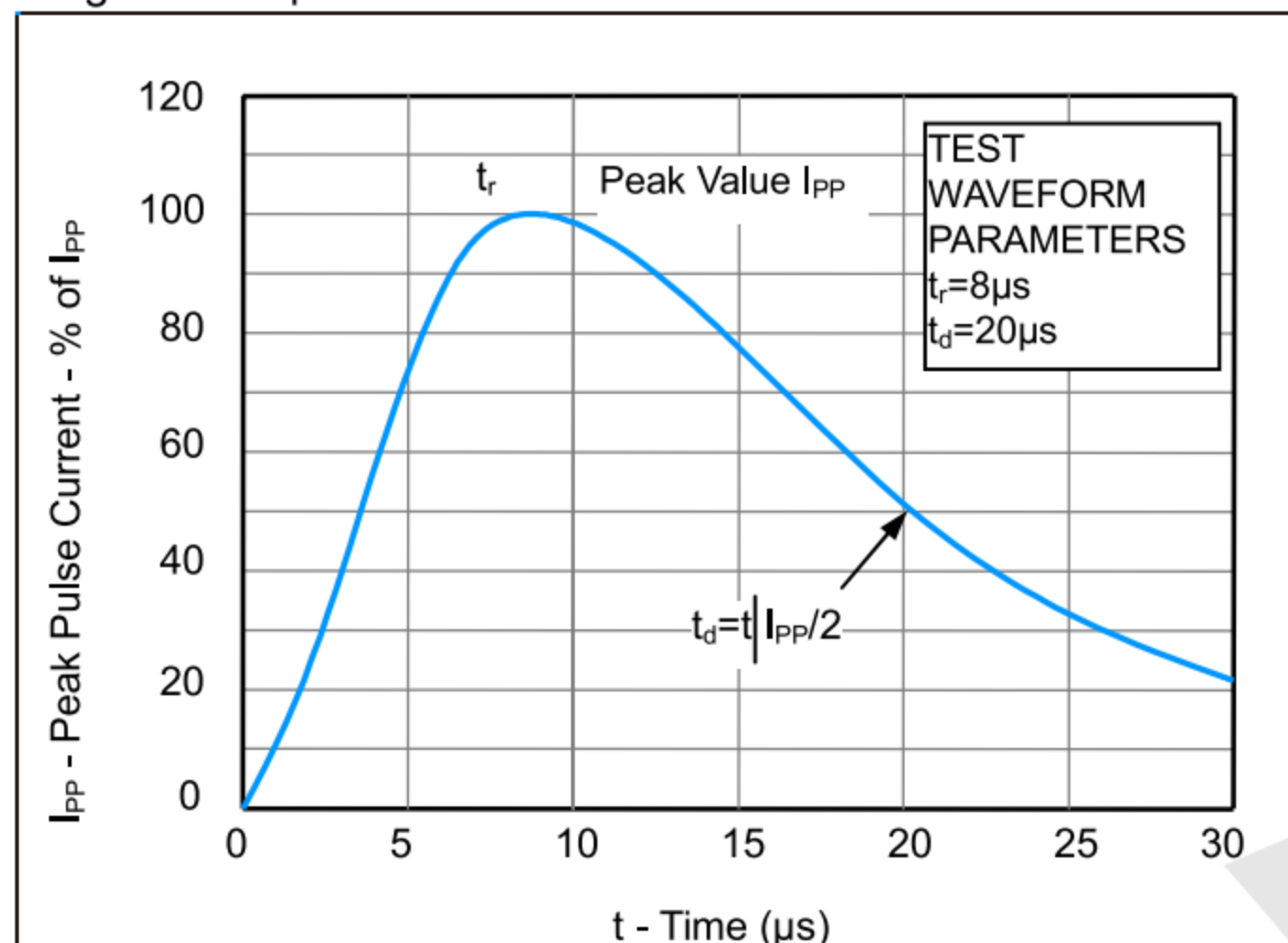


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

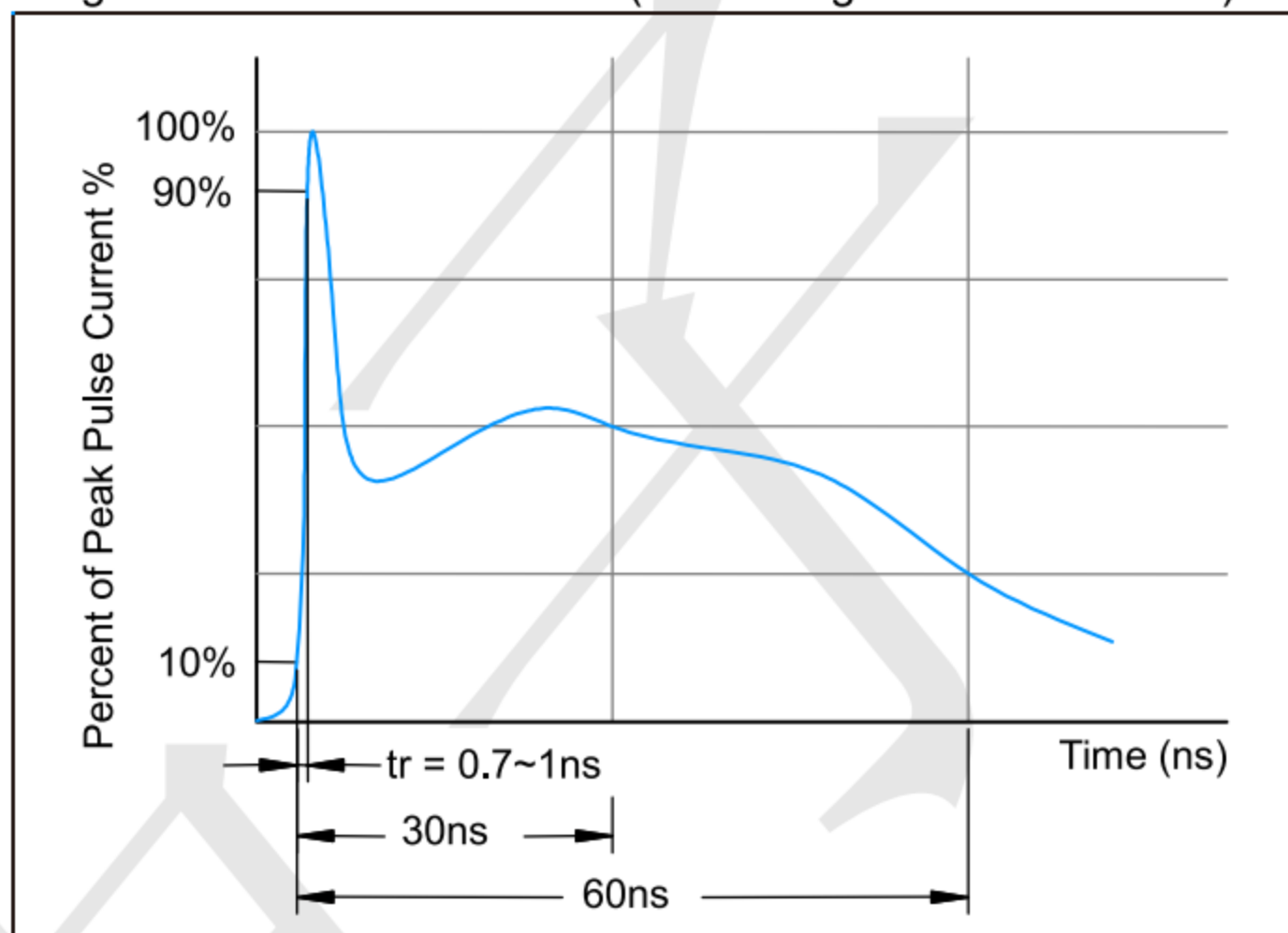
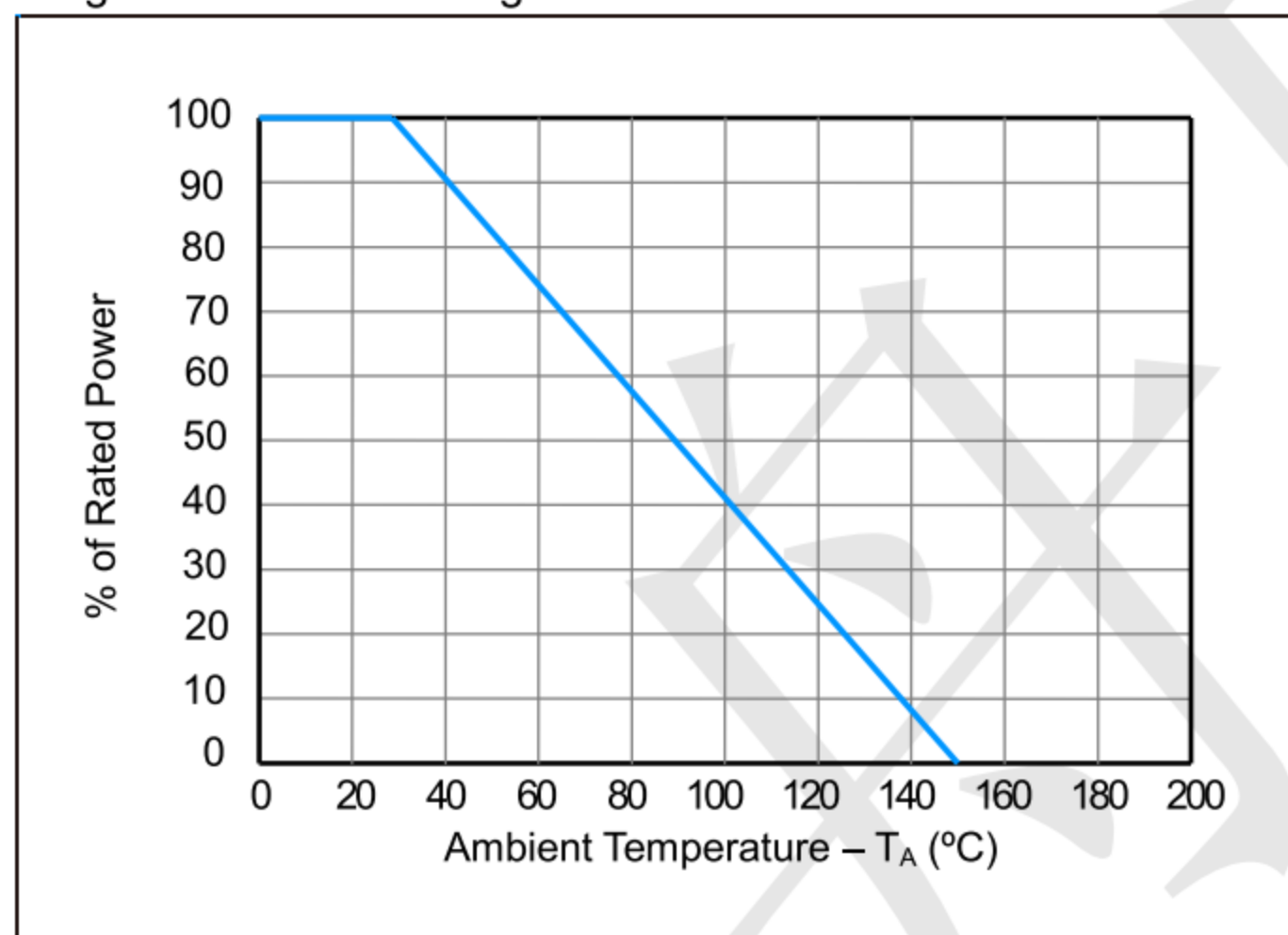
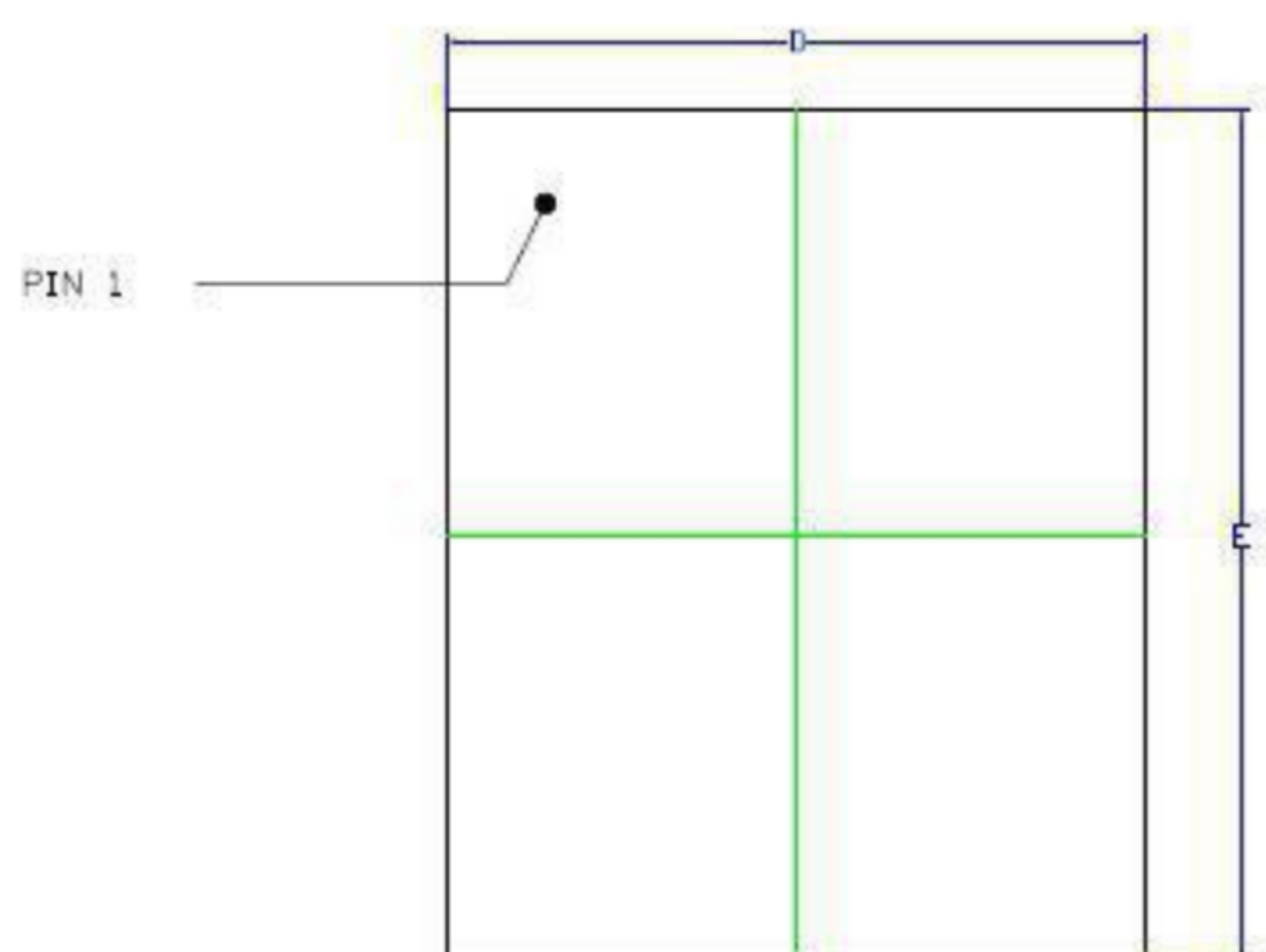


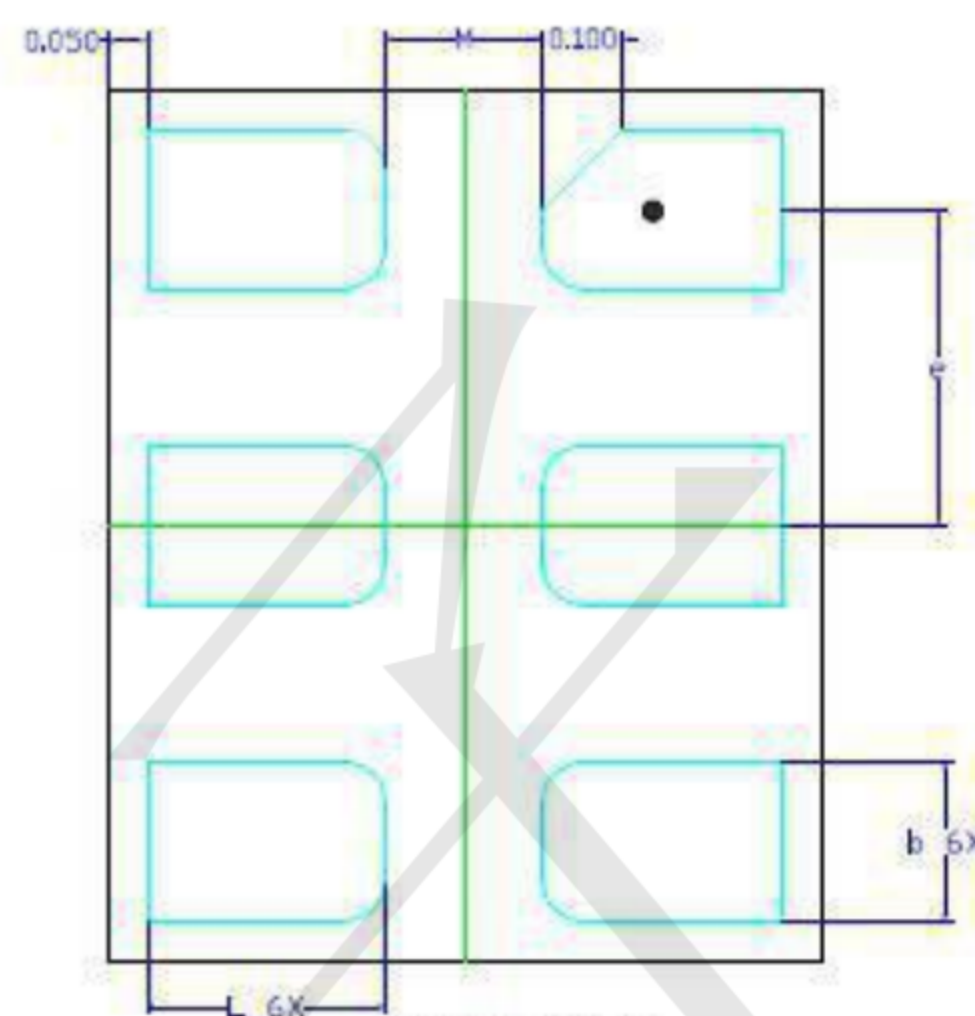
Fig3. Power Derating Curve



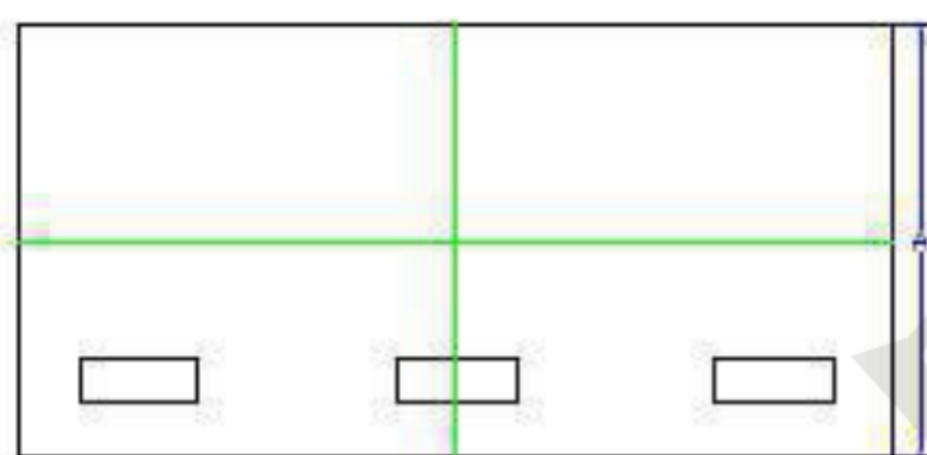
DFN1109-6 Package Information



TOP VIEW



BOTTOM VIEW



SIDE VIEW

COMMON DIMENSION (MM)			
PKG	DFN1109		
REF.	MIN.	NOM.	MAX.
A	0.40	0.45	0.50
D	0.85	0.90	0.95
E	1.05	1.10	1.15
b	0.15	0.20	0.25
L	0.25	0.30	0.35
e	0.35	0.40	0.45
M	0.15	0.20	0.25