ME24VZ1UAD

1. Protection Solution To Meet

- IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact)
- IEC61000-4-4 (EFT) 80A (5/50ns)
- IEC61000-4-5 (Lightning) 80A (8/20μs)

2. Features

- Protects one Uni-directional V_{bus}
- Low clamping voltage
- Working voltage: 24V
- Low leakage current
- RoHS compliant

3. Main Application

- Cell phone handsets and accessories
- Microprocessor based equipment
- Personal digital assistants (PDA's)
- Notebooks, desktops, and servers
- Portable instrumentation

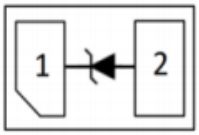
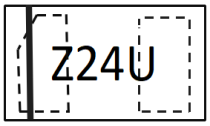
4. Mechanical Characteristics

- DFN1610-2L package
- Molding compound flammability rating: UL 94V-0
- Weight 6 milligrams (approximate)
- Lead finish: lead free
- Marking code: Z24U

5. Absolute Maximum Ratings(T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Contact)	$V_{ESD-Contact}$	±30	KV
ESD per IEC 61000-4-2 (Air)	$V_{ESD-Air}$	±30	KV
Peak Pulse Power(8/20us)	P_{pp}	2640	W
Peak Pulse Current (8/20us)	I_{pp}	80	A
Operating Temperature	T_{OPT}	-55~+150	°C
Storage Temperature Range	T_{stg}	-55~+150	°C

6. Pinning information

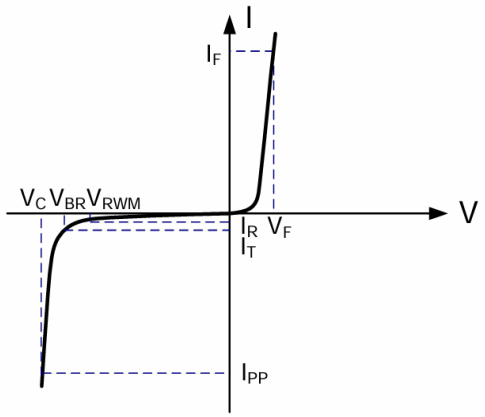
Simplified outline	Equivalent Circuit	Marking	Package
			DFN1610-2L

7.Electrical Characteristics(Tamb=25°C)

Parameter	Symbols	Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				24	V
Breakdown Voltage	V_{BR}	I_T =1mA	26.5			V
Reverse Leakage Current	I_R	V_{RWM}=24V			0.5	uA
Clamping Voltage	V_C	I_{PP}=80A , t_p=8/20us		30	33	V
Junction Capacitance	C_J	V_R =0V ,f=1MHz		180		pF

8.Electrical Parameters

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current@V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @I_T
V_F	Forward Voltage
I_F	Forward Test Currecnt



9.Typical Characterisitics

Fig.1 8/20us Waveform Per IEC6100-4-5

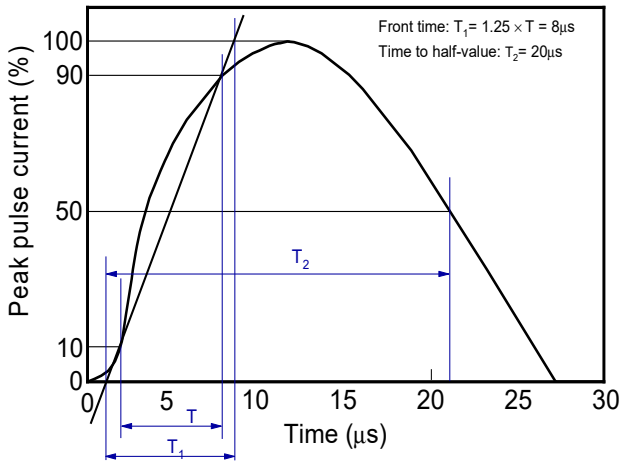


Fig.2 Contact Discharge Current Waveform per IEC61000-4-2

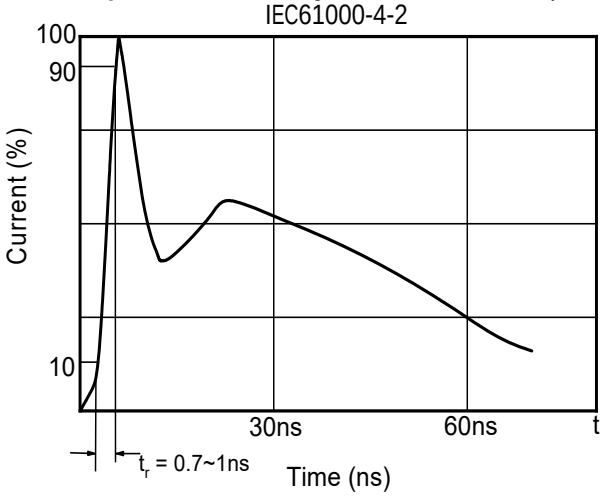


Fig.3 Clamping Voltage Vs. Peak Pulse Current

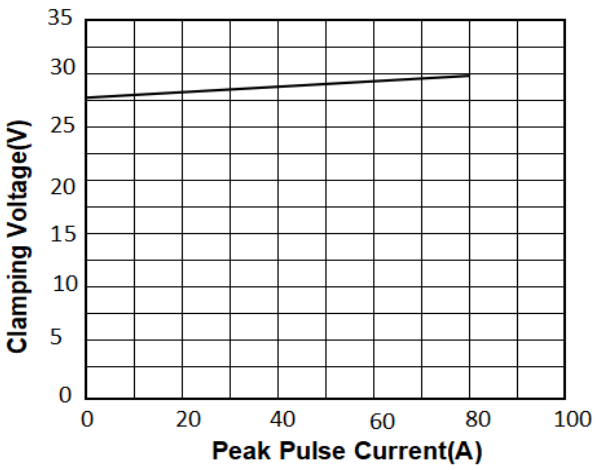
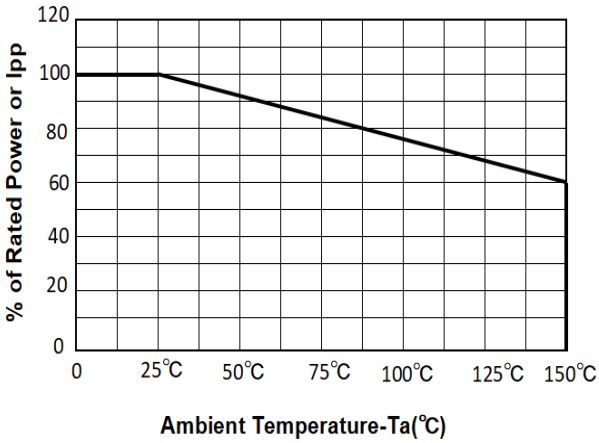


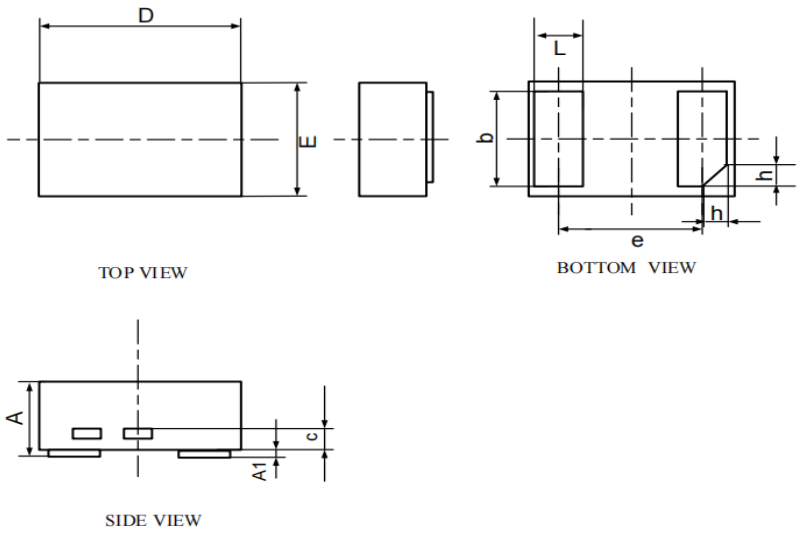
Fig.4 Power Derating



The curve above is for reference only.

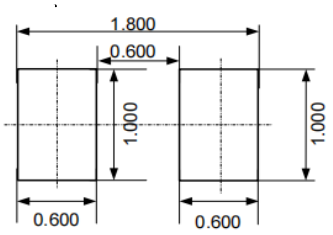
10. Outline Drawing

DFN1610-2L **Package Outline Dimensions**



DIMENSIONS			
SYMBOL	MILLIMETERS		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0.00	0.02	0.05
b	0.75	0.80	0.85
c	0.10	0.15	0.20
D	1.55	1.60	1.65
e	1.10BSC		
E	0.95	1.00	1.05
L	0.35	0.40	0.45
h	0.15	0.20	0.25

11. Suggested Pad Layout



Note:

1.Controlling dimension:in/millimeters.

2.General tolerance: ±0.05mm.

3.The pad layout is for reference purposes only.

12.PACKAGE SPECIFICATIONS

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (pcs)	QTY/Box (pcs)	Q'TY/Carton (pcs)
DFN1610-2L	7'	178	10000	150,000	600,000

13.Important Notice and Disclaimer

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