

ME18VZ1BAB

1. Features

- 252Watts peak pulse power ($t_p = 8/20\mu s$)
- Bi-directional configurations
- Solid-state silicon-avalanche technology
- Capacitance: 20pF typical
- Low clamping voltage
- Low leakage current
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
Air discharge: $\pm 30KV$
Contact discharge: $\pm 30KV$
 - IEC61000-4-4 (EFT) 40A (5/50ns)
 - IEC61000-4-5(Lightning) 7A (8/20us)

2. Application

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Digital Cameras
- Peripherals

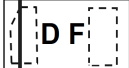
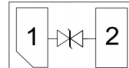
3. Mechanical Data

- Package: DFN1006
- UL Flammability Classification Rating 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

4. Absolute Maximum Rating

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Contact) ESD per IEC 61000-4-2 (Air)	V_{ESD}	± 30 ± 30	KV
Peak Pulse Power(8/20 μs)	P_{PP}	252	W
Reverse Working Voltage	V_{RWM}	18	V
Reverse Working Voltage	I_{PP}	7	A
Operating Temperature	T_{OPT}	-55~+125	°C
Storage Temperature	T_{stg}	-55~+150	°C

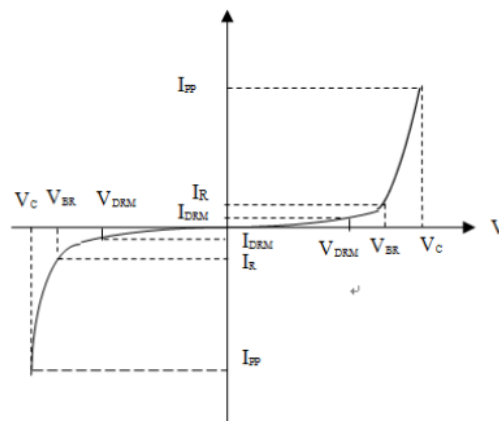
5. Pinning information

Pin	Symbol	Description	Simplified outline	Equivalent Circuit	Marking	Package
2	Bi	Nonpolar			DF	DFN1006-2L

6. Electrical Characteristics (T_{amb}=25°C)

Parameter	Symbols	Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V _{RWM}				18	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	19.5			V
Reverse Leakage Current	I _R	V _{RWM} =18V			0.5	uA
Clamping Voltage	V _C	I _{pp} =1A, t _p =8/20us			26	V
		I _{pp} =7A, t _p =8/20us			36	V
Junction Capacitance	C _J	V _R =0V, f=1MHz		20		pF

Symbol	Parameter
I _{pp}	Maximum Reverse Peak Pulse Current
V _C	Clamping Voltage@I _{pp}
V _{RWM}	Reverse Working Voltage
I _R	Maximum Reverse Leakage Current
I _T	Test Current
V _{BR}	Breakdown Voltage@I _T



7. Typical Characteristics

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

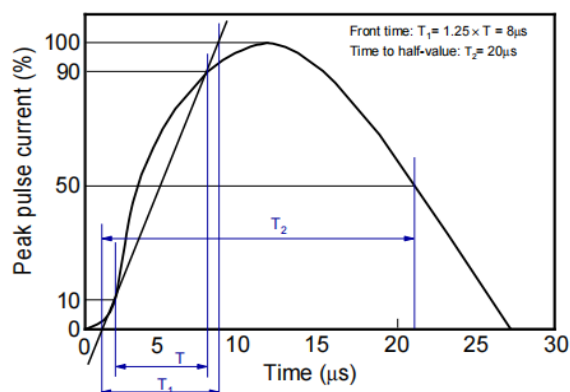


Fig.2 Contact Discharge Current Waveform per IEC61000-4-2

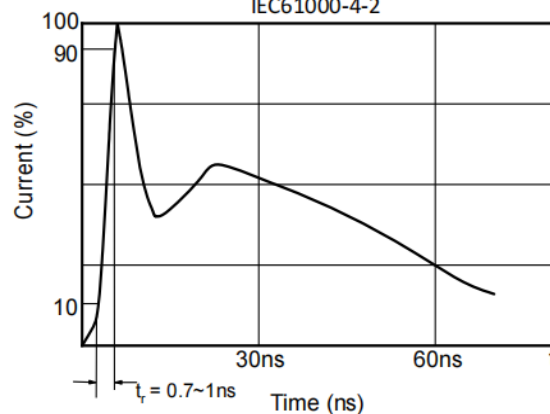


Fig.3 Clamping Voltage Vs. Peak Pulse Current

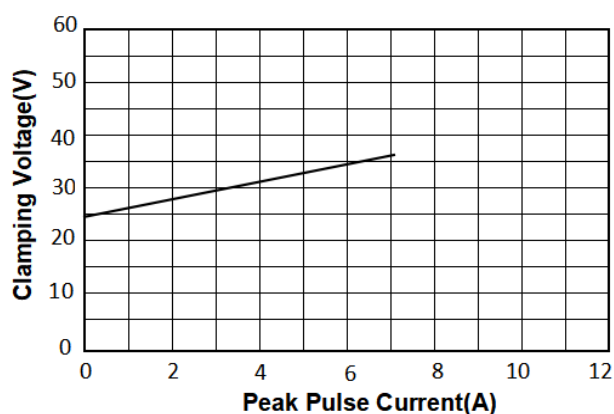


Fig.4 Capacitance VS Bias

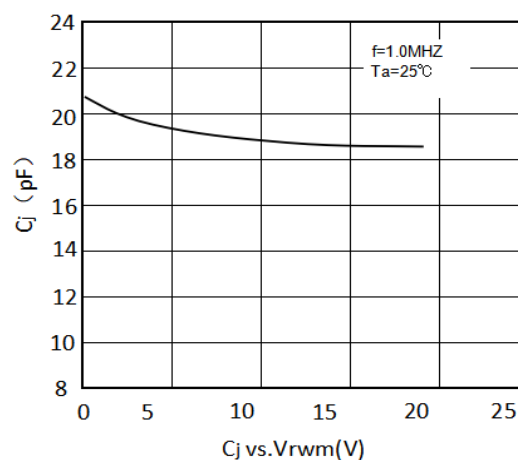


Fig.5 Non-Repetitive Peak Pulse Power vs Pulse Time

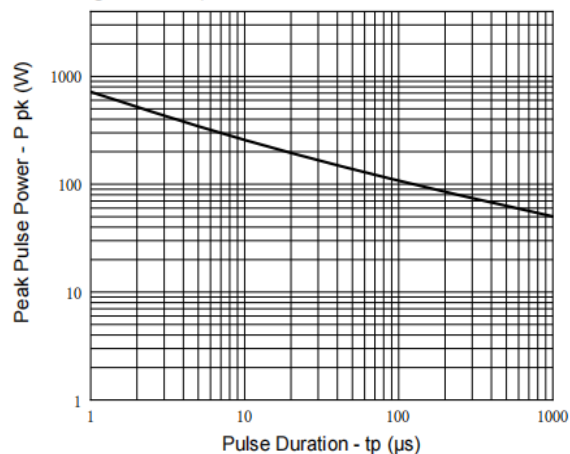
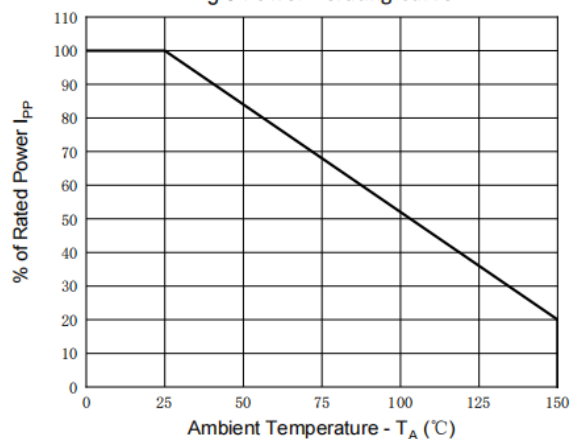
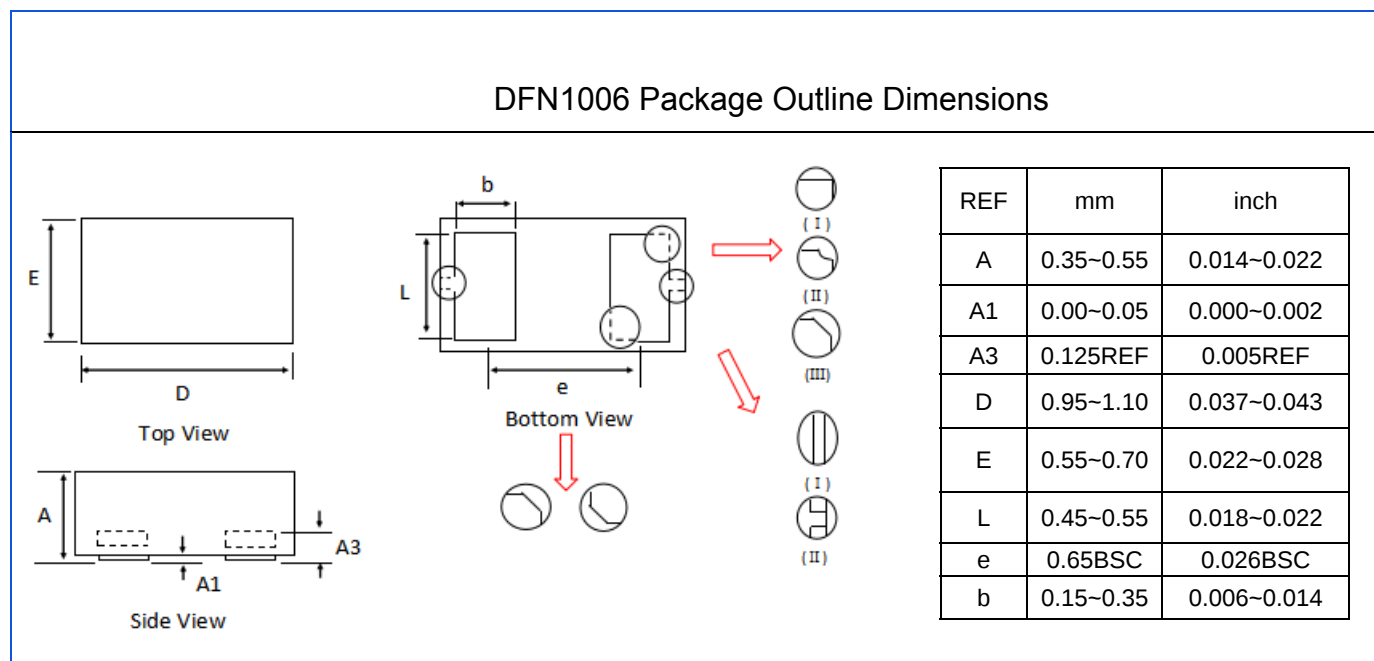


Fig.6 Power Derating Curve



8.Outline Drawing



9. Reel packing

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (pcs)	QTY/Box (pcs)	Q'TY/Carton (pcs)
DFN1006	7'	178	10,000	100,000	400,000

10.Important Notice and Disclaimer

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