

ME5V0Z1BABH

1. Features

- 360Watts peak pulse power ($t_p = 8/20\mu s$)
- Bi-directional configurations
- Solid-state silicon-avalanche technology
- Capacitance: 60pF 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) 30A (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}	360	W
Reverse Working Voltage	V_{RWM}	5	V
Peak Pulse Current	I_{PP}	30	A
Operating Temperature	T_{OPT}	-55~+125	°C
Storage Temperature	T_{stg}	-55~+150	°C

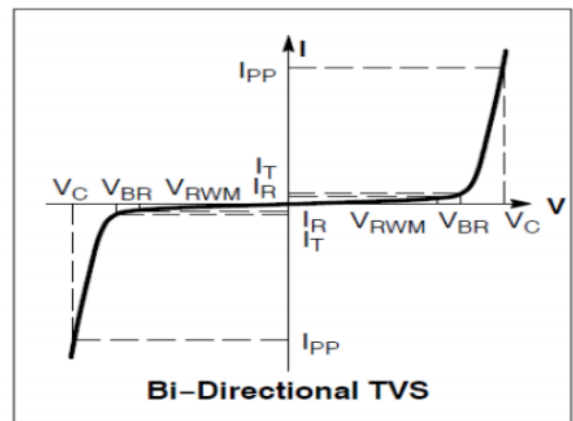
5. Pinning information

Pin	Symbol	Description	Simplified outline	Equivalent Circuit	Marking	Package
2	Bi	Nonpolar			.B8	DFN1006-2L

6. Electrical Characteristics (Tamb=25°C)

Parameter	Symbols	Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6			V
Reverse Leakage Current	I_R	$V_{RWM}=5V$			0.1	μA
Clamping Voltage	V_C	$I_{PP}=1A, t_p=8/20\mu s$		7.5	9	V
		$I_{PP}=30A, t_p=8/20\mu s$		9.5	12	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$		60	100	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

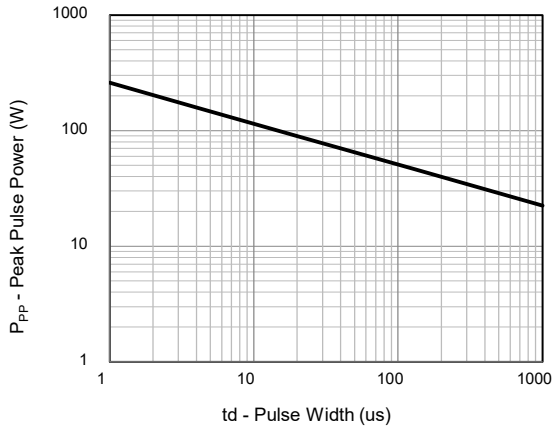


Figure 1. Peak Pulse Power Rating

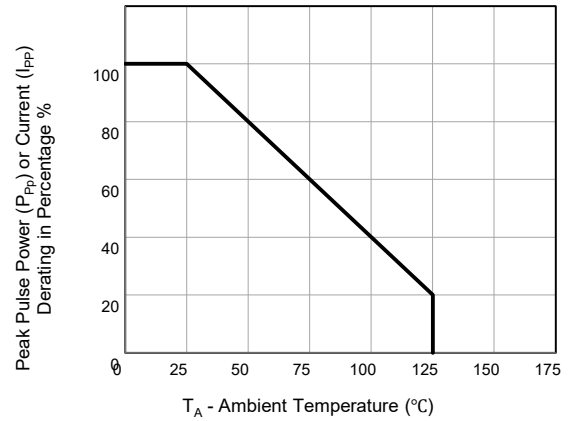


Figure 2. Pulse Derating Curve

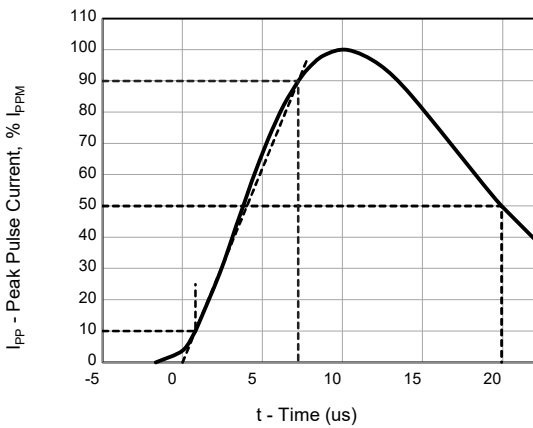


Figure 3. 8/20us Pulse Waveform

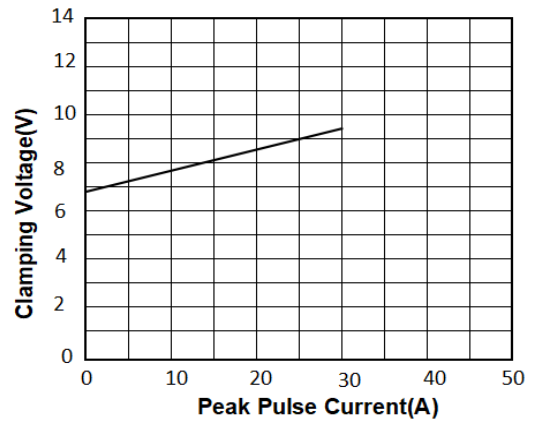


Figure 4. Clamping Voltage Vs. Peak Pulse Current

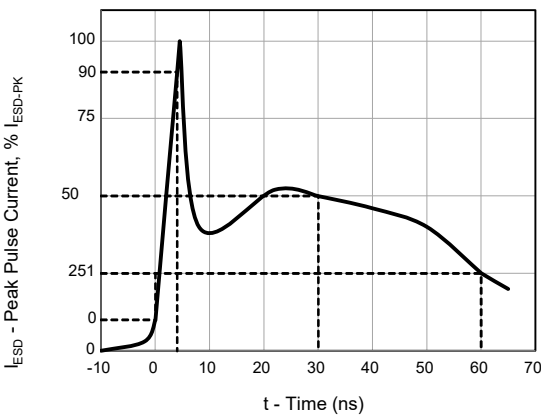


Figure 5. ESD Pulse Waveform (IEC61000-4-2)

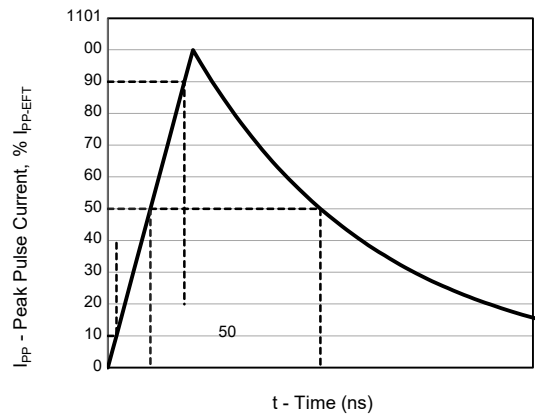
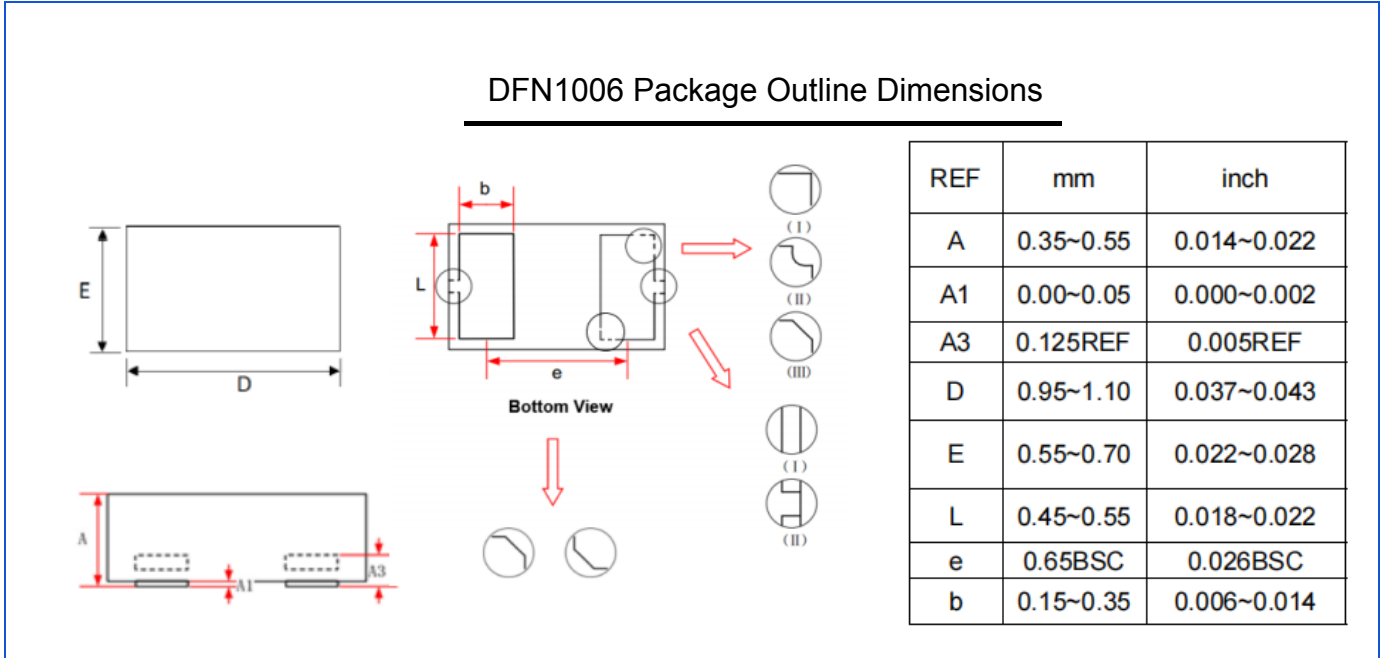


Figure 6. 5/50ns EFT Waveform (IEC61000-4-4)

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

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