ME5V0U1BAB

1. Features

- 36Watts peak pulse power (tp = 8/20μs)
- Bi-directional configurations
- Solid-state silicon-avalanche technology
- Capacitance: 3.5pF typical
- Low clamping voltage
- Low leakage current
- Complies with following standards:
  - IEC 61000-4-2 (ESD) immunity test
    Air discharge: ±15KV
    Contact discharge: ±8KV
  - IEC61000-4-4 (EFT) 40A (5/50ns)
  - IEC61000-4-5(Lightning) 3A (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}	±15 ±8	KV
Peak Pulse Power(8/20μs)	P_{PP}	36	W
Reverse Working Voltage	V_{RWM}	5	V
Peak Pulse Current(Tp=8/20us)	I_{PP}	3	A
Operating Temperature	T_{OPT}	-55~+125	°C
Storage Temperature	T_{stg}	-55~+150	°C

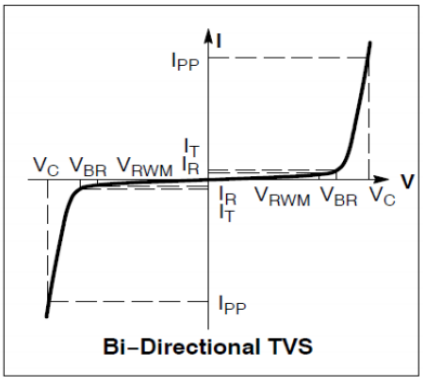
5. Pinning information

Pin	Polarity	Description	Simplified outline	Equivalent Circuit	Marking	Package
2	Bi	Nonpolar	(1) (2)	1 2	5KU	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	5.6			V
Reverse Leakage Current	I_R	V_{RWM}=5V			0.5	uA
Clamping Voltage	V_C	I_{PP}=1A , t_p=8/20us			10	V
		I_{pp}=3A , t_p=8/20us			12	V
Junction Capacitance	C_J	V_R =0V ,f=1MHz		3.5	5.0	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

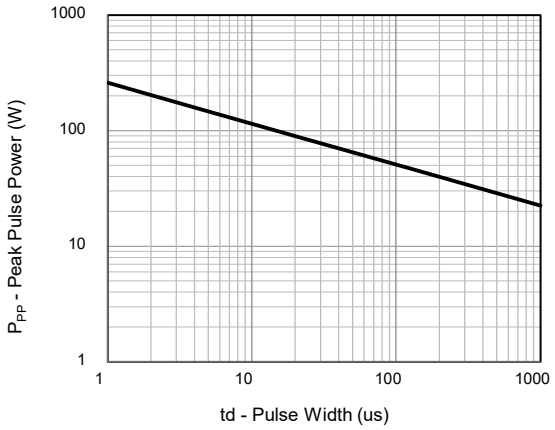


Figure 1. Peak Pulse Power Rating

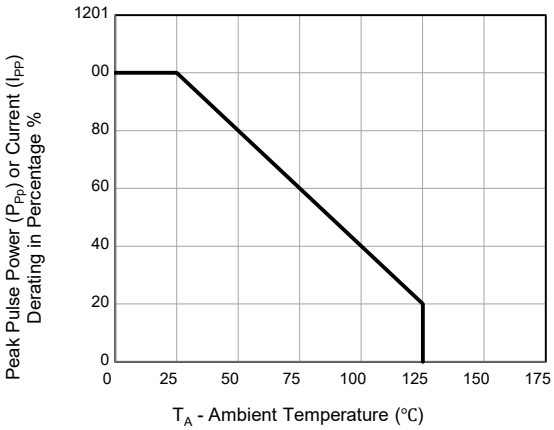


Figure2. Pulse Derating Curve

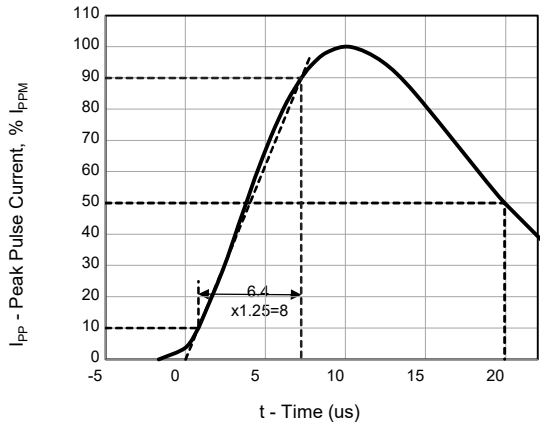


Figure 3. 8/20us Pulse Waveform

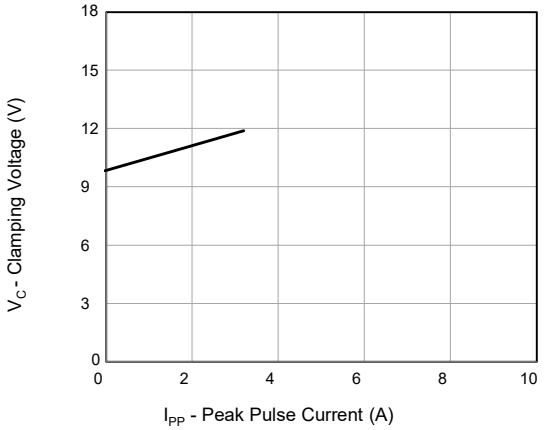


Figure 4. Typical Clamping Voltage

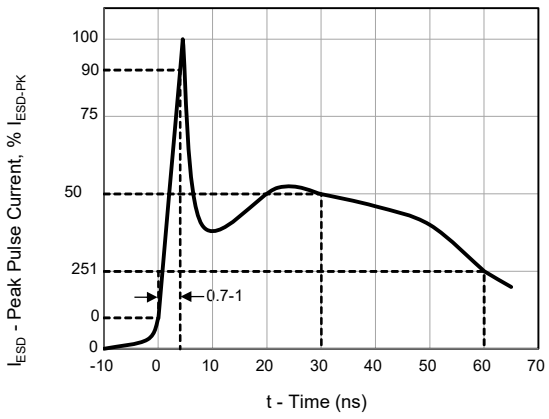


Figure 5. ESD Pulse Waveform (IEC61000-4-2)

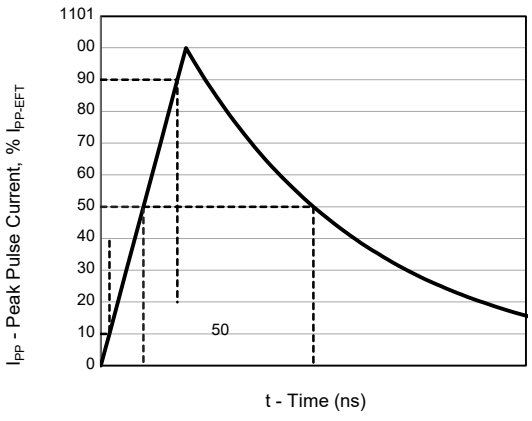
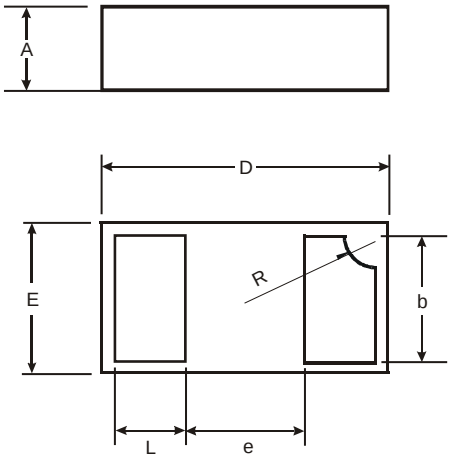


Figure 6. 5/50ns EFT Waveform (IEC61000-4-4)

8.Outline Drawing

DFN1006 Package Outline Dimensions



DFN1006			
Dim	**Min**	**Max**	**Typ**
A	0.45	0.55	0.50
b	0.45	0.55	0.50
D	0.95	1.05	1.00
E	0.55	0.65	0.60
e	-	-	0.40
L	0.20	0.30	0.25
R	0.07	0.17	0.12
All Dimensions in mm			

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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