

ME20VZ1UABH

1. Features

- 868Watts peak pulse power ($t_p = 8/20\mu s$)
- Uni-directional configurations
- Solid-state silicon-avalanche technology
- Capacitance: 65pF 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) 28A (8/20us)

2. Application

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

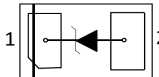
3. Mechanical Data

- Package: DFN1006-2L
- 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}	868	W
Reverse Working Voltage	V_{RWM}	20	V
Maximum Reverse Peak Pulse Current	I_{PP}	28	A
Operating Temperature	T_{OPT}	-55~+125	°C
Storage Temperature	T_{stg}	-55~+150	°C

5. Pinning information

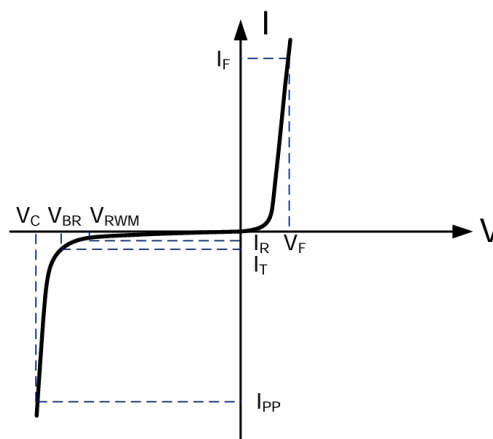
Pin	Symbol	Simplified outline	Equivalent Circuit	Marking	Package
2	Uni			DH	DFN1006-2L

6. Electrical Characteristics ($T_{amb}=25^{\circ}C$)

Parameter	Symbols	Condition	Min	Typ	Max	Unit
Reverse Working Voltage	V_{RWM}				20	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	22			V
Reverse Leakage Current	I_R	$V_{RWM}=20V$			1	μA
Clamping Voltage	V_C	$I_{pp}=28A$, $t_p=8/20\mu s$		28	31	V
Junction Capacitance	C_J	$V_R=0V$, $f=1MHz$		65		pF

7. Electrical Parameters

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
V_F	Forward Voltage
I_F	Forward Test Current



8. Typical Characteristics

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

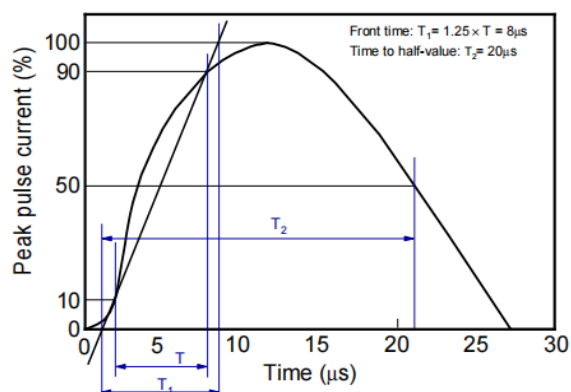


Fig.2 Contact Discharge Current Waveform per IEC61000-4-2

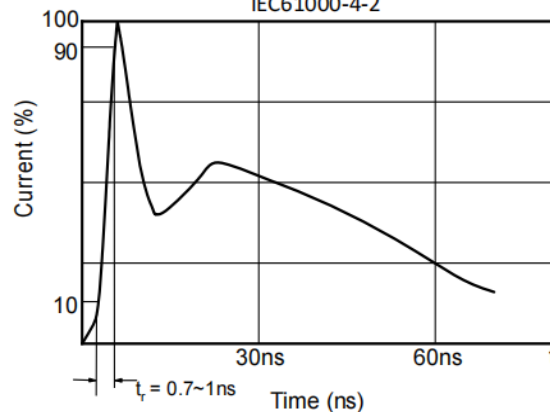


Fig.3 Clamping Voltage Vs. Peak Pulse Current

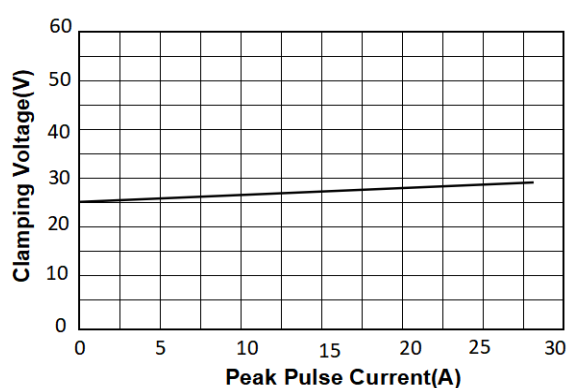
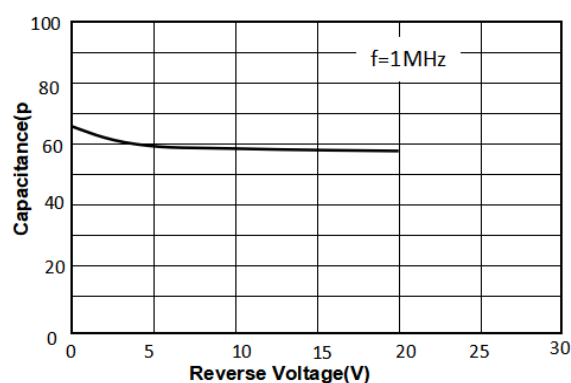
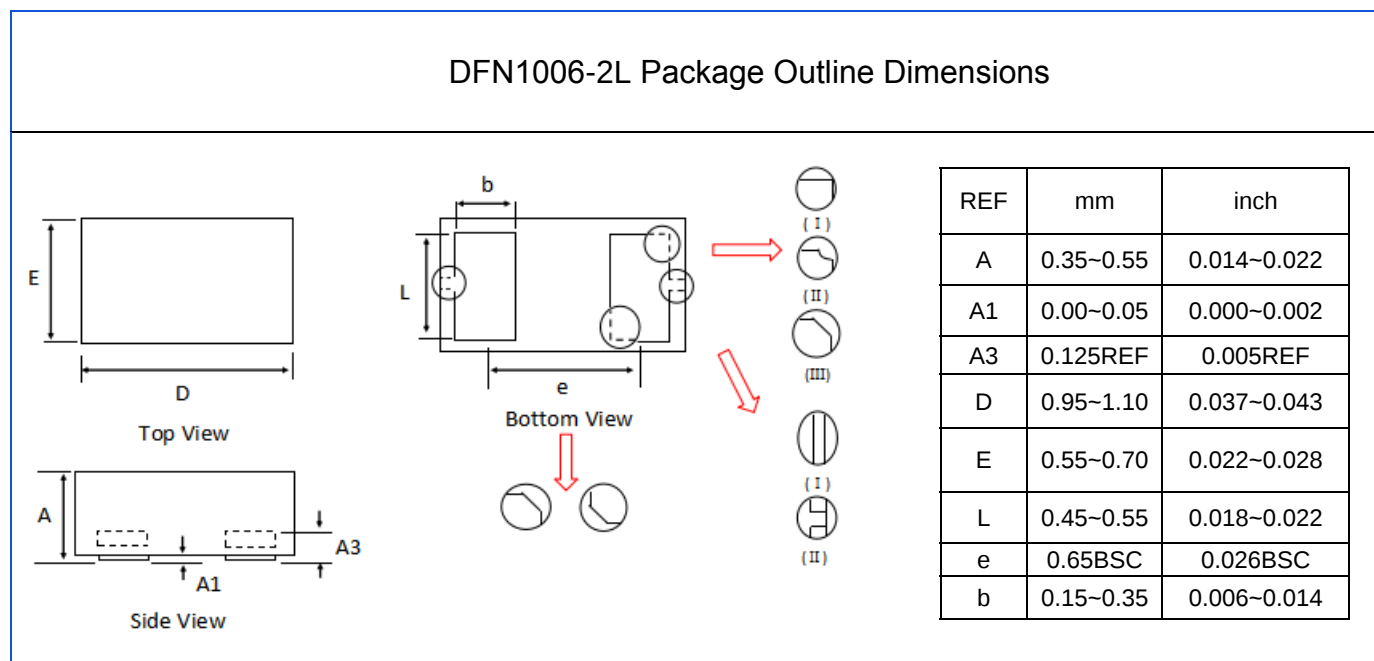


Fig.4 Capacitance VS Reverse Voltage



9.Outline Drawing



10. Reel packing

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (pcs)	QTY/Box (pcs)	Q'TY/Carton (pcs)
DFN1006-2L	7'	178	10,000	100,000	400,000

11.Important Notice and Disclaimer

Microdiode Semiconductor (Shenzhen) reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design,purchase or use.

Microdiode Semiconductor (Shenzhen) makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, not does Microdiode Semiconductor (Shenzhen) assume any liability for application assistance or customer product design. Microdiode Semiconductor (Shenzhen) does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Microdiode Semiconductor (Shenzhen).

Microdiode Semiconductor (Shenzhen) products are not authorized for use as critical components in life support devices or systems without express written approval of Microdiode Semiconductor (Shenzhen).