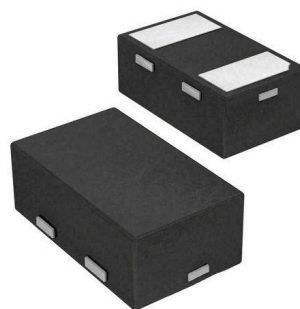


»Features

- 450Watts peak pulse power ($t_p = 8/20\mu s$)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Protection one data/power line
- IEC 61000-4-2 $\pm 8kV$ contact $\pm 15kV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 4A (8/20 μs)



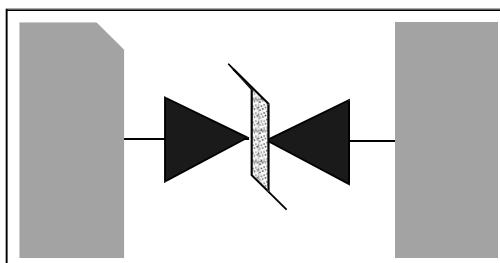
»Applications

- Power lines
- Personal Digital Assistants
- Notebooks, Desktops, and Servers

»Mechanical Data

- DFN1006 package
- Molding compound flammability rating: UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

»Schematic & PIN Configuration



DFN1006

»Absolute Maximum Rating

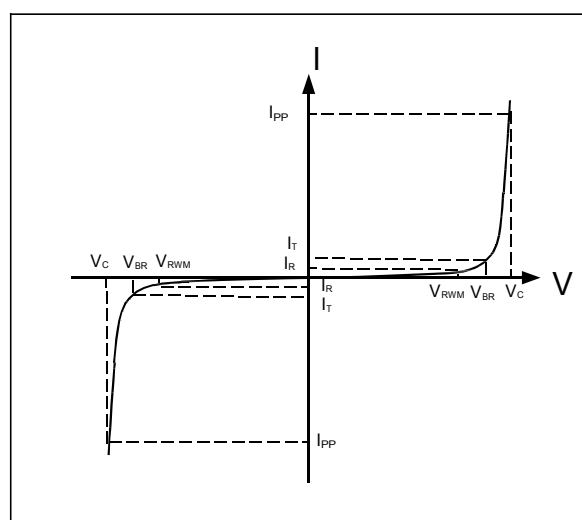
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	450	Watts
Peak Pulse Current ($t_p = 8/20\mu s$)(note1)	I_{PP}	4	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	15 8	kV
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}C$
Junction Temperature	T_J	-55 to + 125	$^{\circ}C$
Storage Temperature	T_{stg}	-55 to + 125	$^{\circ}C$

»Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				36	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	40			V
Reverse Leakage Current	I_R	$V_{RWM} = 36V, T = 25^{\circ}C$		0.1	0.5	μA
Peak Pulse Current	I_{PP}	$t_p = 8/20\mu s$			4	A
Clamping Voltage	V_C	$I_{PP} = 4A, t_p = 8/20\mu s$		70		V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		13	20	pF

»Electrical Parameters (TA = 25°C unless otherwise noted)

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}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current



Note: 8/20 μs pulse waveform.

»Typical Characteristic

Fig.1 Peak Pulse Power Rating Curve

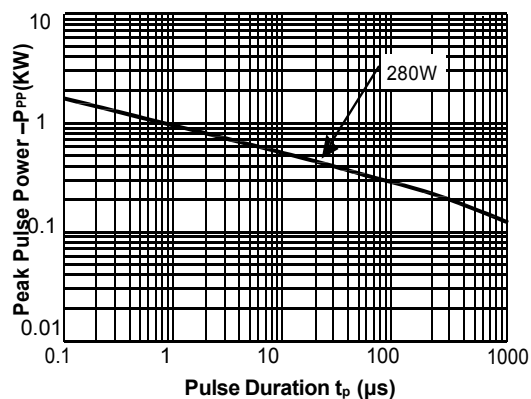


Fig.2 Pulse Derating Curve

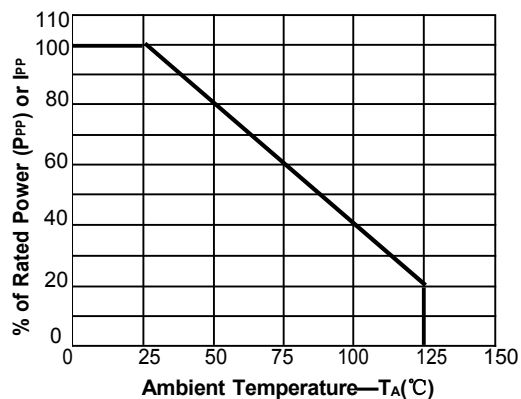


Fig.3 PulseWaveform-8/20μs

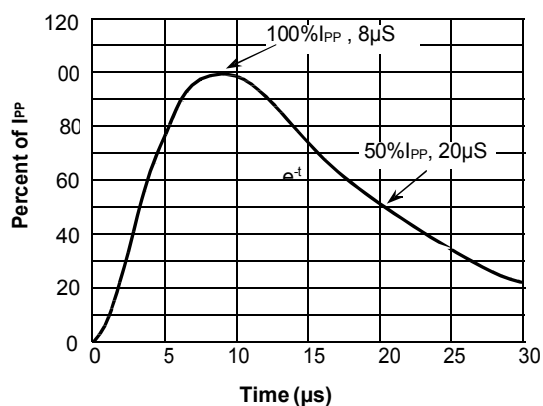


Fig.4 PulseWaveform-ESD(IEC61000-4-2)

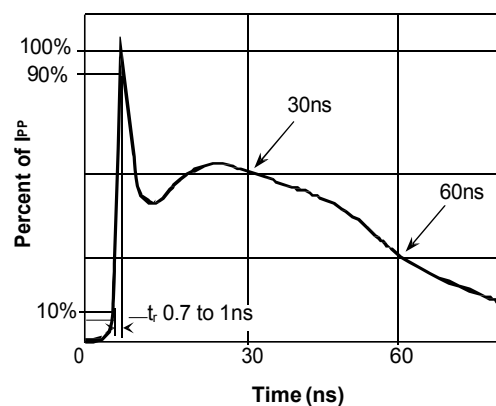


Fig.5 IEC61000-4-2 +8kV ContactDischarge

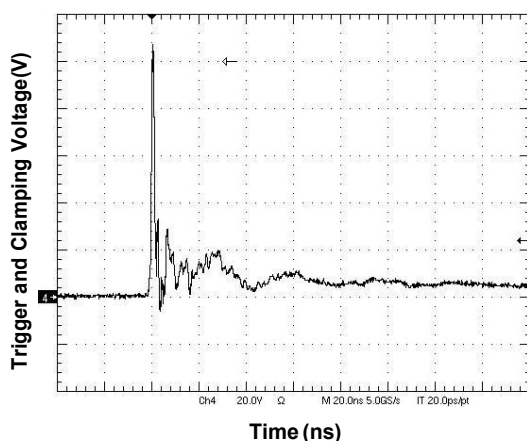
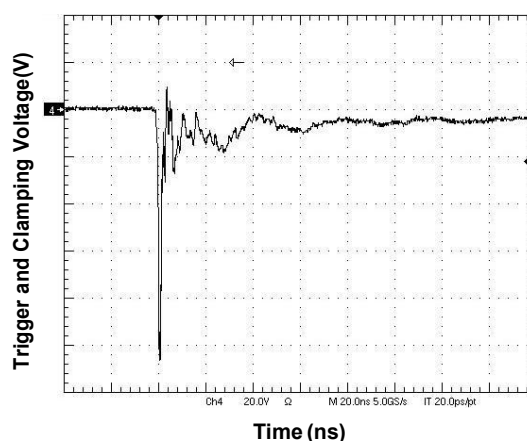
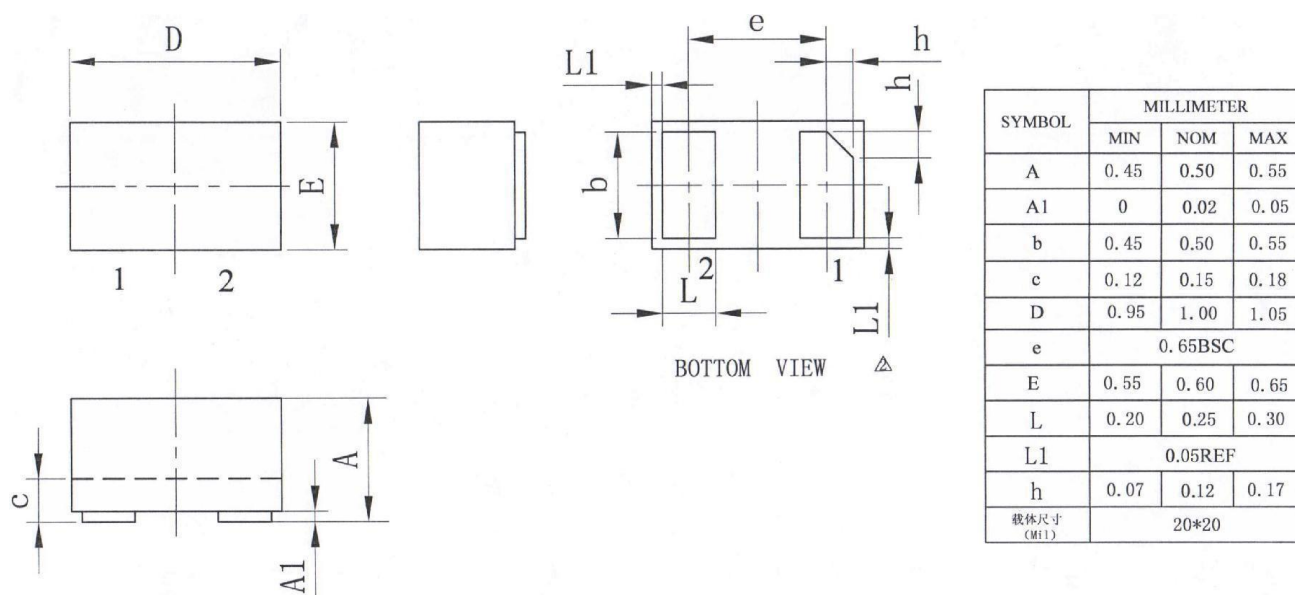


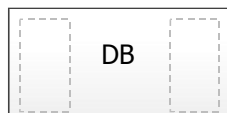
Fig.6 IEC61000-4-2 -8kV ContactDischarge



»Outline Drawing – DFN1006



»Marking



»Ordering information

Order code	Package	Base qty	Delivery mode
BNSPHV36-C	DFN1006	10k	Tape and reel