

## »Features

- 80Watts peak pulse power ( $t_p = 8/20\mu s$ )
- Tiny DFN1006 package
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2  $\pm 15kV$  contact  $\pm 25kV$  air
- IEC 61000-4-4 (EFT) 40A(5/50ns)
- IEC 61000-4-5 (Lightning) 10A (8/20 $\mu s$ )



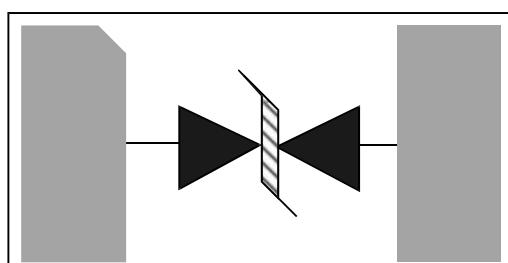
## »Applications

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation

## »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

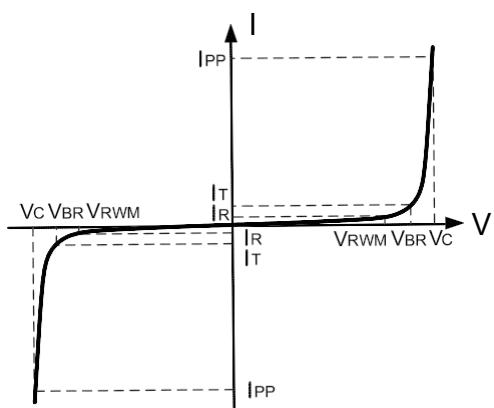
Rating	Symbol	Value	Units
Peak Pulse Power ( $t_p=8/20\mu s$ )	P <sub>PP</sub>	80	Watts
Peak Pulse Current ( $t_p=8/20\mu s$ ) (note1)	I <sub>pp</sub>	10	A
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	V <sub>ESD</sub>	25 15	kV
Lead Soldering Temperature	T <sub>L</sub>	260(10seconds)	°C
Junction Temperature	T <sub>J</sub>	-55 to + 125	°C
Storage Temperature	T <sub>stg</sub>	-55 to + 125	°C

## »Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V <sub>RWM</sub>				3.3	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> =1mA	3.8			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =3.3V,T=25°C		0.1	0.2	μA
Peak Pulse Current	I <sub>PP</sub>	tp =8/20μs			10	A
Clamping Voltage <sup>1)</sup>	V <sub>CL</sub>	I <sub>PP</sub> =16A,t <sub>p</sub> =100ns		8		V
Clamping Voltage <sup>2)</sup>	V <sub>C</sub>	I <sub>PP</sub> =5A,t <sub>p</sub> =8/20μs			6	V
Clamping Voltage <sup>2)</sup>		I <sub>PP</sub> =10A,t <sub>p</sub> =8/20μs			8	V
Dynamic resistance <sup>1)</sup>	R <sub>DYN</sub>			0.2		Ω
Junction Capacitance	C <sub>j</sub>	V <sub>R</sub> = 0V, f = 1MHz		12	18	pF

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

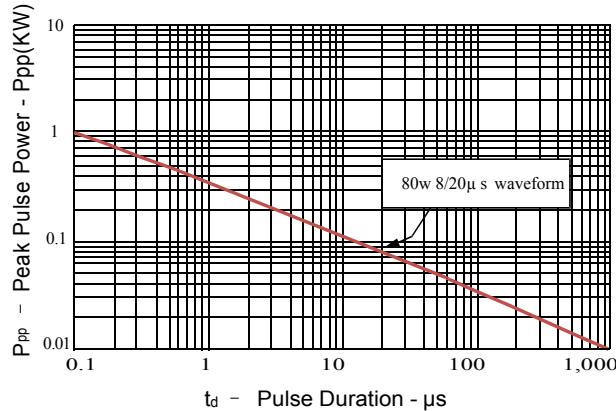
Symbol	Parameter
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current
V <sub>C</sub>	Clamping Voltage @ I <sub>PP</sub>
V <sub>RWM</sub>	Working Peak Reverse Voltage
I <sub>R</sub>	Maximum Reverse Leakage Current @ V <sub>RWM</sub>
V <sub>BR</sub>	Breakdown Voltage @ I <sub>T</sub>
I <sub>T</sub>	Test Current



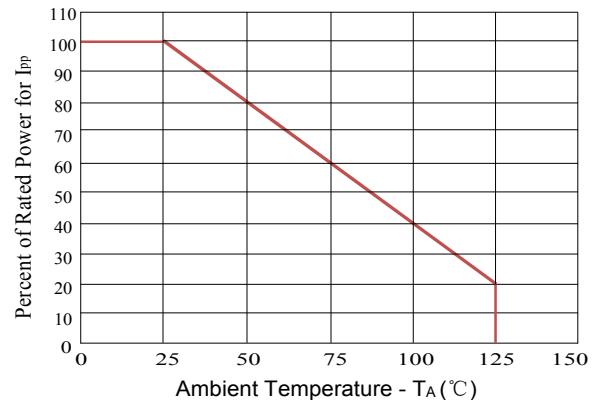
Note: 8/20μs pulsed waveform.

## »Typical Characteristics

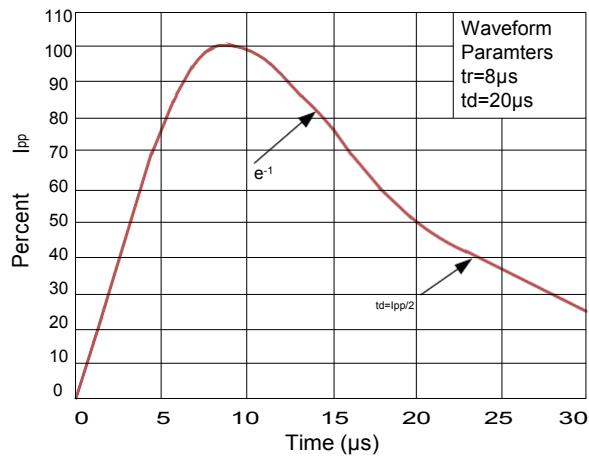
**Figure 1: Peak Pulse Power vs. Pulse Time**



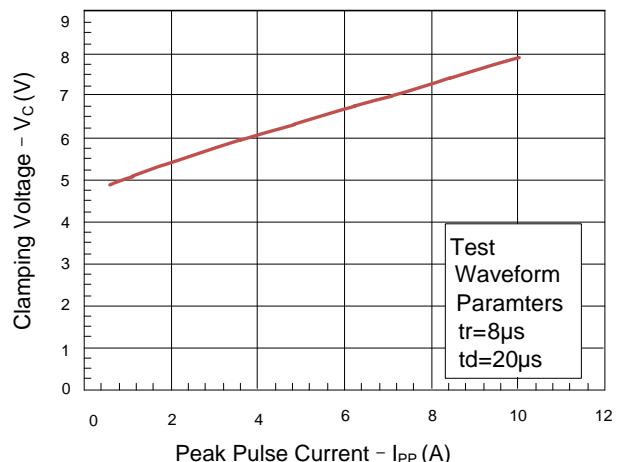
**Figure 2: Power Derating Curve**



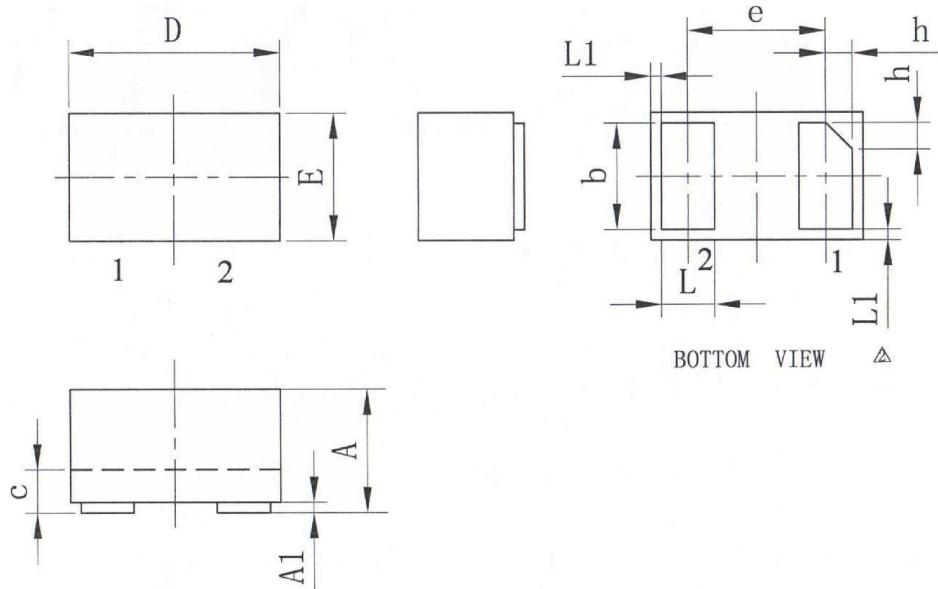
**Figure3: Pulse Waveform**



**Figure 4: Clamping Voltage vs.Ipp**

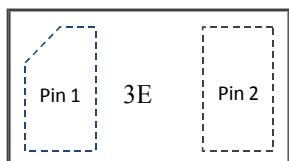


## »Outline Drawing – DFN1006



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.45	0.50	0.55
A1	0	0.02	0.05
b	0.45	0.50	0.55
c	0.12	0.15	0.18
D	0.95	1.00	1.05
e	0.65BSC		
E	0.55	0.60	0.65
L	0.20	0.25	0.30
L1	0.05REF		
h	0.07	0.12	0.17
载体尺寸 (Mil)	20*20		

## »Marking



## »Ordering information

Order code	Package	Base qty	Delivery mode
BESD3V3B15G	DFN1006	10k	Tape and reel

# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

***Click to view similar products for ESD Suppressors / TVS Diodes category:***

***Click to view products by Bourne manufacturer:***

Other Similar products are found below :

[60KS200C](#) [D18V0L1B2LP-7B](#) [D5V0F4U5P5-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE39CA-TP](#) [P6KE8.2A](#) [JANTX1N6053A](#)  
[SA110CA](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#) [SMBJ33CATR](#) [SMBJ8.0A](#) [ESD101-B1-02ELS](#) [E6327](#) [ESD105-B1-02EL](#) [E6327](#) [ESD112-B1-02EL](#) [E6327](#) [ESD119B1W01005E6327XTSA1](#) [ESD5V0L1B02VH6327XTSA1](#) [ESD7451N2T5G](#) [19180-510](#) [CPDT-5V0USP-HF](#)  
[3.0SMCJ33CA-F](#) [3.0SMCJ36A-F](#) [HSPC16701B02TP](#) [JANTX1N6126A](#) [JANTX1N6462](#) [JANTX1N6465](#) [USB50805e3/TR7](#)  
[D3V3Q1B2DLP3-7](#) [D55V0M1B2WS-7](#) [DRTR5V0U4SL-7](#) [SCM1293A-04SO](#) [ESD200-B1-CSP0201](#) [E6327](#) [SM12-7](#) [SM1605E3/TR13](#)  
[SMLJ45CA-TP](#) [CEN955 W/DATA](#) [82350120560](#) [VESD12A1A-HD1-GS08](#) [CPDUR5V0R-HF](#) [CPDQC5V0U-HF](#) [CPDQC5V0USP-HF](#)  
[CPDQC5V0-HF](#) [D1213A-01LP4-7B](#) [ESD101-B1-02EL](#) [E6327](#) [824500181](#) [MMAD1108/TR13](#) [5KP100A](#)