

68W Surface Mount ESD Protection**FEATURES**

- Package optimized for high-speed lines
- Ultra-small package (1.0mmx0.6mmx0.4mm)
- Protects one data, control or power line
- Low capacitance
- Low leakage current
- Low clamping voltage

MECHANICAL DATA

- Case : Molded, plastic DFN1006-2L
- Polarity : Shown follows
- Epoxy : UL94-V0 rated flame retardant

DFN1006-2L PACKAGE

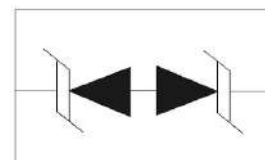
PB = Device Marking Code

APPLICATIONS

- Portable Electronics
- Desktops, Servers and Notebooks
- Cellular Phones
- MP3 Ports
- Digital Ports
- Subscriber Identity Module (SIM) card

IEC COMPATIBILITY

- IEC 61000-4-2 (ESD) $\pm 30\text{kV}$ (air), $\pm 30\text{kV}$ (contact)
- IEC 61000-4-5 (Lightning) 4A (8/20 μs)
- IEC 61000-4-4 (EFT) 40A (5/50ns)

SCHEMATIC & PIN CONFIGURATION



68W Surface Mount ESD Protection

ABSOLUTE MAXIMUM RATING

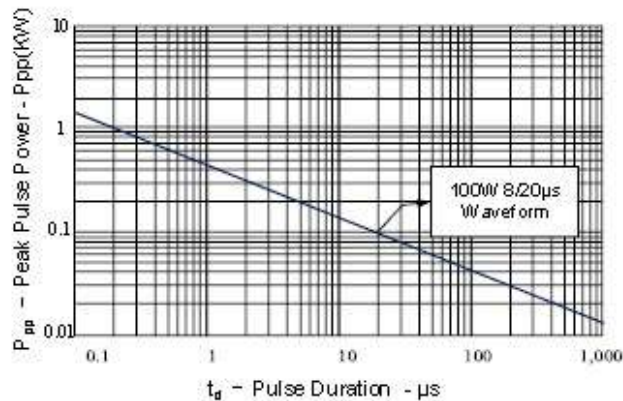
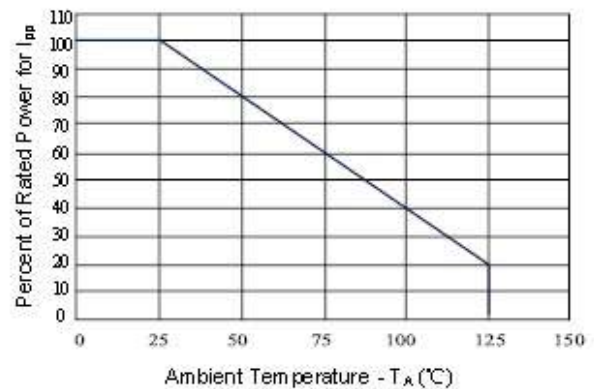
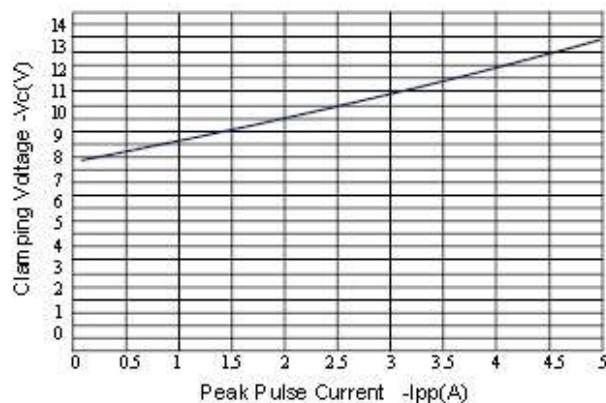
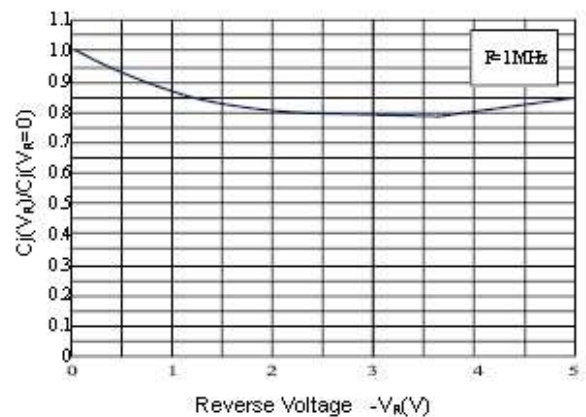
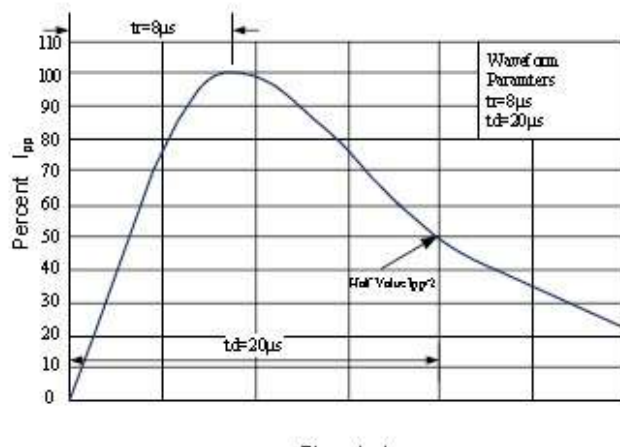
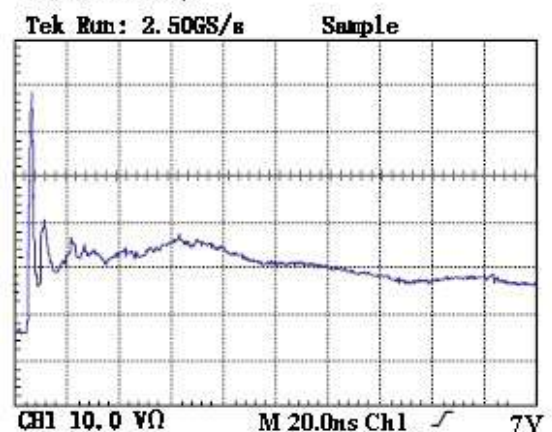
Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power (8/20 μ s)	68	W
V_{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	± 30 ± 30	KV
T_j	Operating Temperature	-55/+125	°C
T_{STG}	Storage Temperature	-55/+150	°C

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Stand-Off Voltage				5.0	V
V_{BR}	Reverse Breakdown voltage	$I_T=1mA$	6.0			V
I_R	Reverse leakage current.	$V_{RWM}=5V$			1	μA
I_{PP}	Peak Pulse Current	$t_p=8/20\mu s$			4	A
V_C	Clamping Voltage	$I_{PP}=1A, t_p=8/20\mu s$ $I_{PP}=4A, t_p=8/20\mu s$			9.5 17	V
C_J	Junction Capacitance	$V_R=0V, f=1MHz$		8	15	pF



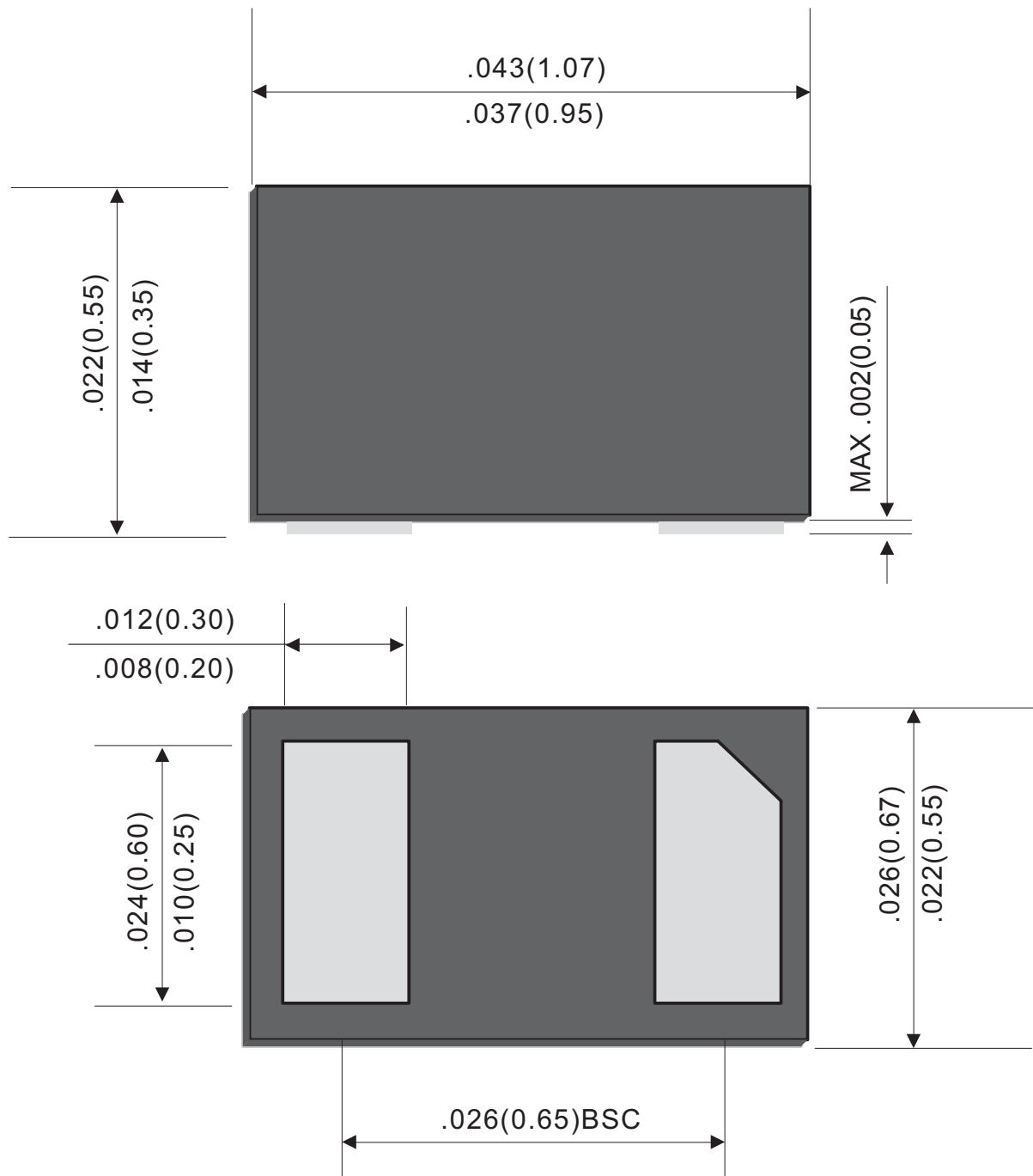
ELECTRICAL CHARACTERISTICS CURVE

Figure 1: Peak Pulse Power Vs Pulse Time**Figure 2: Power Derating Curve****Figure 3: Clamping Voltage vs. Peak Pulse Current****Figure 4: Normalized Junction Capacitance vs. Reverse Voltage****Figure 5: Pulse Waveform****Figure 6: ESD Clamping(8kV Contact per IEC 61000-4-2)**



Outline Drawing

DFN1006-2L



Dimensions in inches and (millimeters)

Rev.B-1

**Ordering Information:**

Device PN	Packing
SESD05PBD -T ⁽¹⁾ H ⁽²⁾ -WS ⁽³⁾	Tape&Reel: 10 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Halogen free product for packing code suffix "H"

(3) WS : Willas brand abbreviation, Label Type does not display

*****Disclaimer*****

WILLAS reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. WILLAS or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on WILLAS data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. WILLAS does not assume any liability arising out of the application or use of any product or circuit.

This is the preliminary specification. WILLAS products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of WILLAS. Customers using or selling WILLAS components for use in such applications do so at their own risk and shall agree to fully indemnify WILLAS Inc and its subsidiaries harmless against all claims, damages and expenditures.