



FEATURES

- IEC61000-4-2 (ESD) $\pm 8\text{kV}$ (Contact)
 $\pm 15\text{kV}$ (Air)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- IEC61000-4-5 (Lighting) 3A (8/20 μs)
- 100 Watts Peak Pulse Power (tp=8/20 μs)
- Working voltages : 24V
- Low clamping voltage
- Low leakage current

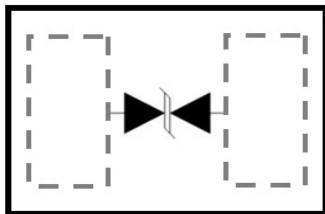
MACHANICAL DATA

- DFN1006 package
- Flammability Rating: UL 94V-0
- Packaging: Tape and Reel
- Reel size: 7 inch

ORDERING INFORMATION

- Device: LXE1006F24VBG
- Package: DFN1006
- Marking: DH
- Material: Halogen free
- Packing: Tape & Reel
- Quantity per reel: 10,000pcs

PIN CONFIGURATION



DESCRIPTION

LXE1006F24VBG is a low-capacitance Transient Voltage Suppressor (TVS) designed to provide electrostatic discharge (ESD) protection for data, control or power lines. With maximum capacitance of 15pF only, LXE1006F24VBG is designed to protect parasitic-sensitive systems against over-voltage and over-current transient events. It complies with IEC 61000-4-2 (ESD), Level 4 ($\pm 8\text{kV}$ contact, $\pm 15\text{kV}$ air discharge), very fast charged device model (CDM) ESD and cable discharge event (CDE), etc.

LXE1006F24VBG uses ultra-small DFN1006 package. Each LXE1006F24VBG device can protect one data line. It offers system designers flexibility to protect single data line where space is a premium concern.

APPLICATIONS

- Serial and Parallel Ports
- Notebooks, Desktops, Servers
- Projection TV
- Cellular handsets and accessories
- Portable instrumentation
- Peripherals

PACKAGE OUTLINE





ABSOLUTE MAXIMUM RATING

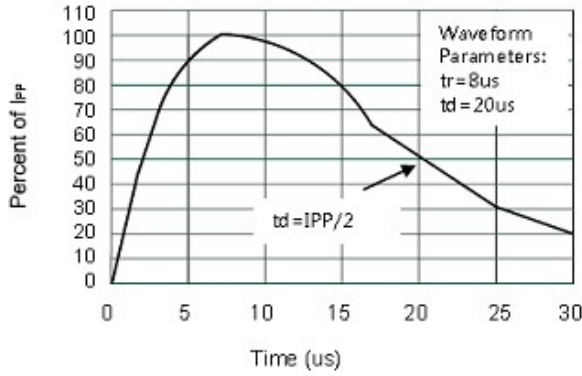
Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Contact)	± 8	kV
	ESD per IEC 61000-4-2 (Air)	± 15	
P_{PP}	Peak Pulse Power (8/20 μ s)	150	W
T_{OPT}	Operating Temperature	-55 ~ +125	$^{\circ}$ C
T_{STG}	Storage Temperature	-55 ~ +150	$^{\circ}$ C
T_L	Lead Soldering Temperature	260 (10 sec.)	$^{\circ}$ C

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

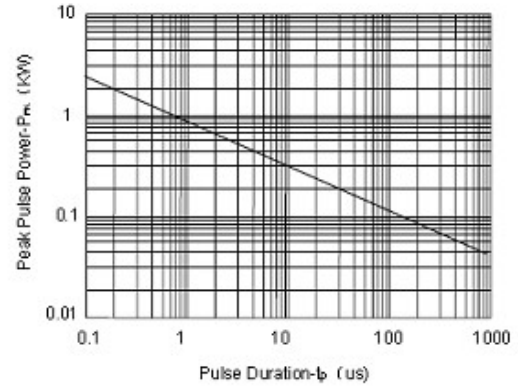
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				24	V
V_{BR}	Reverse Breakdown Voltage	$I_R = 1mA$	26		32	V
I_R	Reverse Leakage Current	$V_{RWM} = 24V$			1	μ A
V_{C1}	Clamping Voltage 1	$I_{PP} = 1A, t_p = 8/20\mu s$			40	V
V_{C2}	Clamping Voltage 2	$I_{PP} = 3A, t_p = 8/20\mu s$			50	V
C_J	Junction Capacitance	$V_R = 0V, f = 1MHz$		8	15	pF



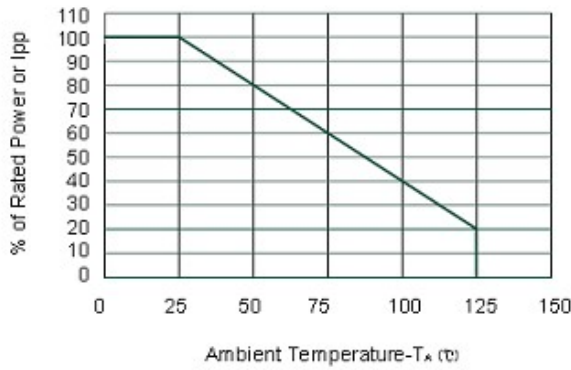
ELECTRICAL CHARACTERISTICS CURVE



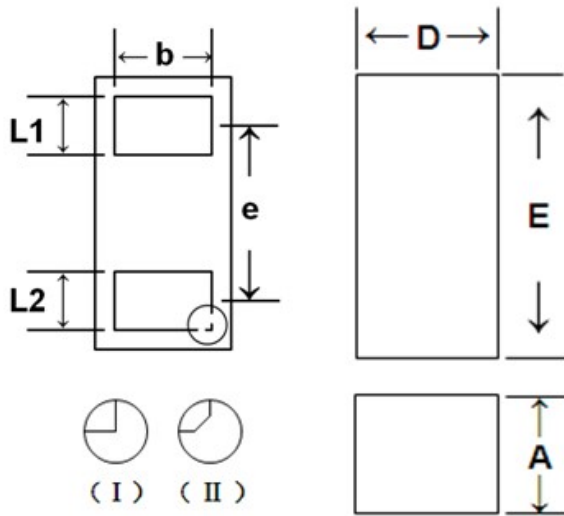
Pulse Waveform



Non-Repetitive Peak Pulse Power vs. Pulse Time

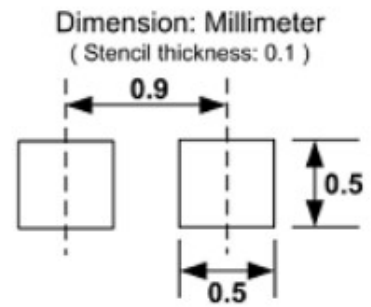


DFN1006 PACKAGE OUTLINE DIMENSIONS



NOTE: ALL DIMENSIONS IN MM

	MIN	NOM	MAX
D	0.55	0.60	0.65
E	0.95	1.00	1.05
L1	0.20	0.25	0.30
L2	0.20	0.25	0.30
A	0.45	0.50	0.55
b	0.45	0.50	0.55
e		0.64BSC	



Soldering Footprint