

High Capacitance ESD Protection Diode

1 Features

- IEC 61000-4-2 Level 4 ESD Protection
 - ± 30 -kV Contact Discharge
 - ± 30 -kV Air Gap Discharge
- Peak Reverse Working Voltage: 4.5 V (Maximum)
- IO Capacitance:
 - 60 pF (Typical)
- DC Breakdown Voltage: 4.6V (Minimum)
- Low Leakage Current: 1 μ A (Maximum)
- Industrial Temperature Range: -55°C to $+150^{\circ}\text{C}$
- Package DFN1006-2L

2 Applications

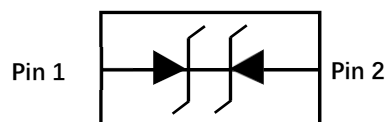
- End Equipment
 - TWS and Smart Wearable
 - TV and Monitors
 - Cellular handsets and accessories
 - Portable electronics
 - Communication systems
 - Computers and peripherals

3 Description

The SLEN24H5CB is a bidirectional ESD protection diode for circuit protection. The SLEN24H5CB is rated to dissipate ESD strikes at the maximum level specified in the IEC 61000-4-2 international standard (Level 4).

The low dynamic resistance and low clamping voltage ensure system level protection against transient events.

4 Pin Configuration and Bottom View



DFN1006-2L

5 Device Information

PART NUMBER	PACKAGE	BODY SIZE (NOM)
SLEN24H5CB	DFN1006-2L	1.00 mm x 0.60mm

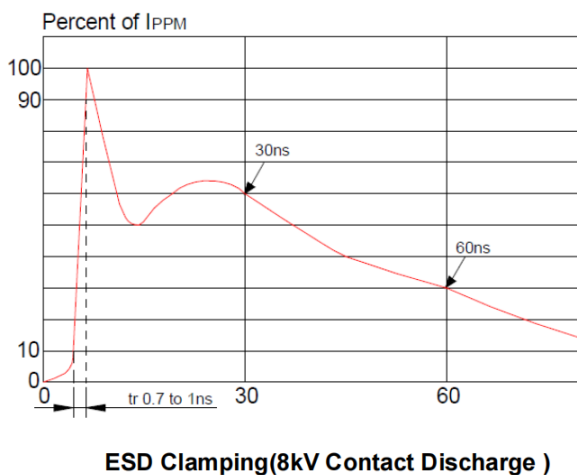
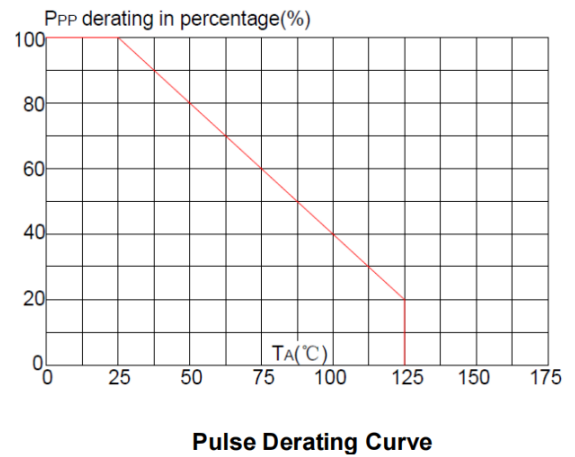
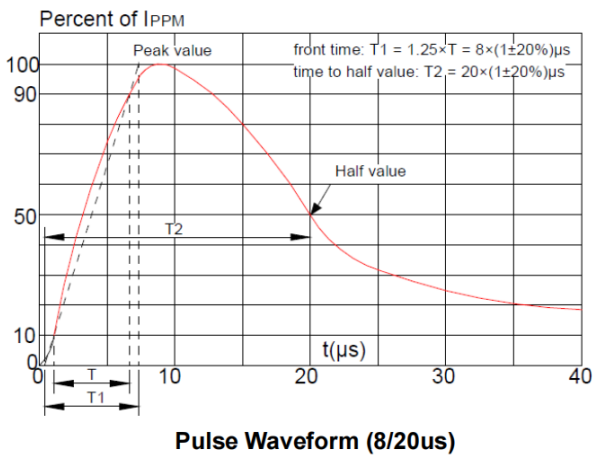
6 Absolute maximum Ratings @25°C

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20 μ s)	P _{PP}	520	W
Peak Pulse Current (tp=8/20 μ s)	I _{PP}	35	A
Operating Temperature	T _J	-55 to 150	$^{\circ}\text{C}$
Storage Temperature	T _{STG}	-55 to 150	$^{\circ}\text{C}$
ESD Protection-Contact Discharge	V _{ESD}	± 30	kV
ESD Protection-Air Discharge	V _{ESD}	± 30	kV

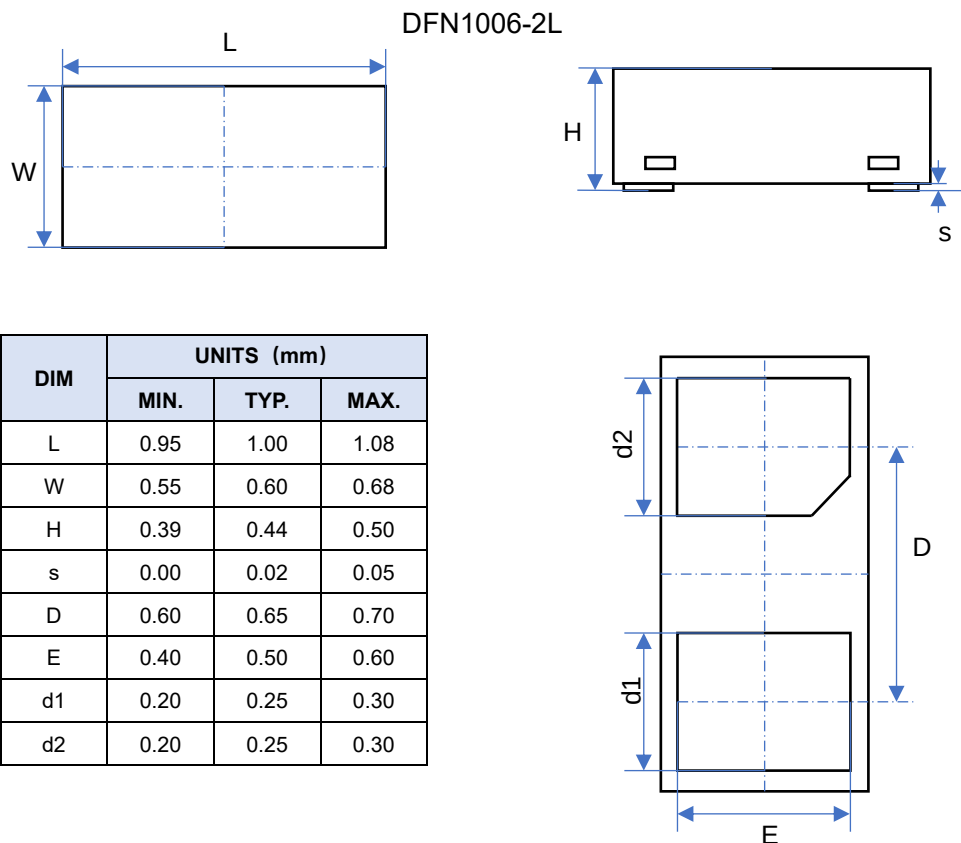
7 Electrical characteristics (@25°C unless otherwise specified)

PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNITS
Peak Reverse Working Voltage	V_{RWM}				4.5	V
Breakdown Voltage	V_{BR}	$I_t = 1mA$	4.6			V
Reverse Leakage Current	I_R	$V_{RWM} = 4.5V, T = 25^\circ C$			1	μA
Clamping Voltage	V_C	$I_{PP} = 20A, t_P = 8/20\mu s$			11	V
Clamping Voltage	V_C	$I_{PP} = 35A, t_P = 8/20\mu s$			15	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		60	80	pF

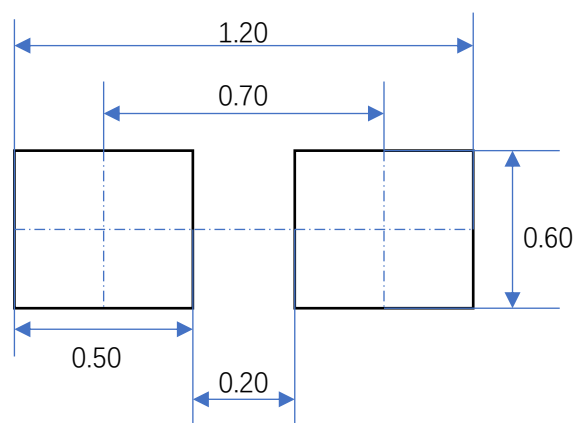
8 Typical Characteristics



9 Product dimension



10 PCB Layout Footprints



11 Ordering Information

Part Number	Packaging	Reel Size
SLEN24H5CB	10000/Tape & Reel	7 inch