

## Features

- Low leakage current
- Low clamping voltage
- IEC 61000-4-2 (ESD Air):  $\pm 30\text{ kV}$
- IEC 61000-4-2 (ESD Contact):  $\pm 30\text{ kV}$
- IEC 61000-4-5 (Lightning 8/20 $\mu\text{s}$ ): 8A

**Reverse Working Voltage**

15V Max.

**Low capacitance**

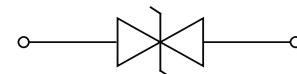
20pF(Typ.)

**DFN1006-2L**



## Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation, Digital Cameras
- Peripherals, Audio Players, Industrial Equipment

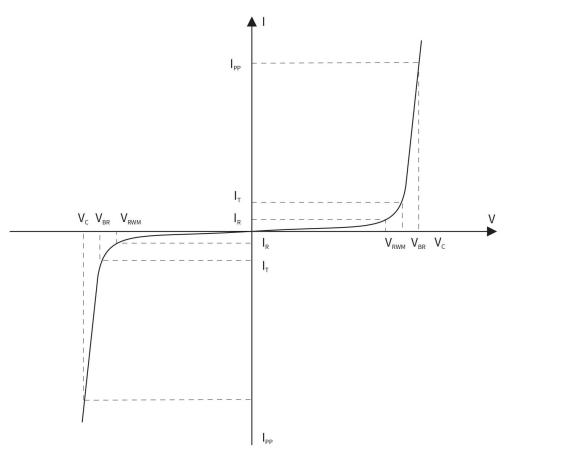


## Maximum Ratings ( Ta=25°C Unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{ESD}$	Electrostatic Discharge Voltage	ESD per IEC 61000-4-2(Air)	$\pm 30$	kV
		ESD per IEC 61000-4-2(Contact)	$\pm 30$	kV
$P_{PP}$	Peak Pulse Power	$t_p = 8/20 \mu\text{s}$	320	W
$I_{PP}$	Rated Peak Pulse Current	$t_p = 8/20 \mu\text{s}$	8.0	A
$T_J$	Operating Junction Temperature Range	—	-55 to +125	°C
$T_{STG}$	Operating Junction Temperature Range	—	-55 to +150	°C

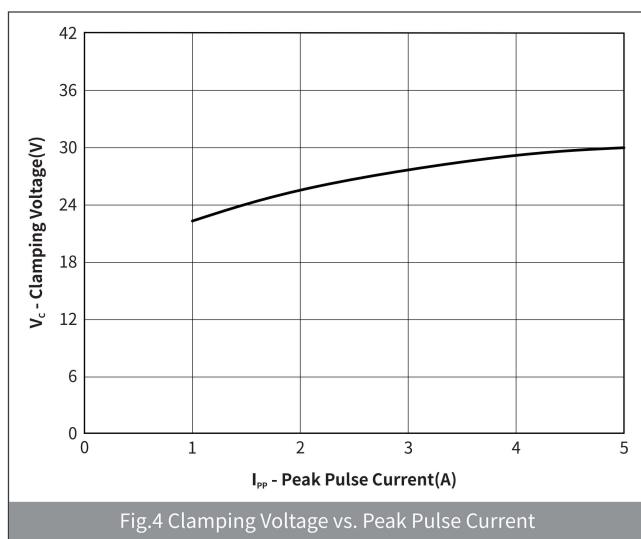
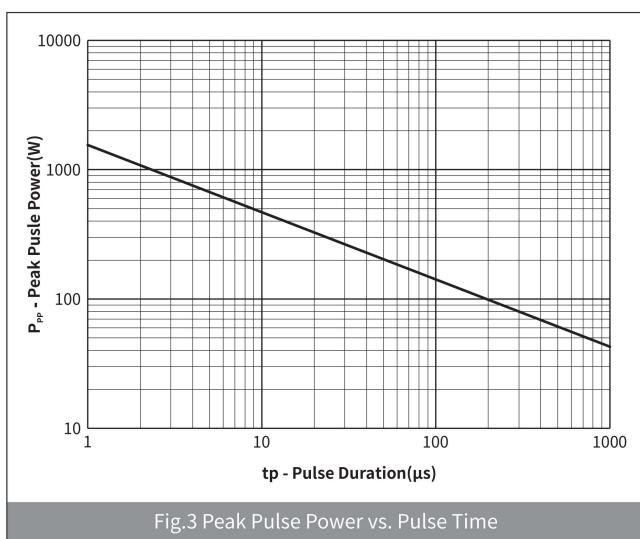
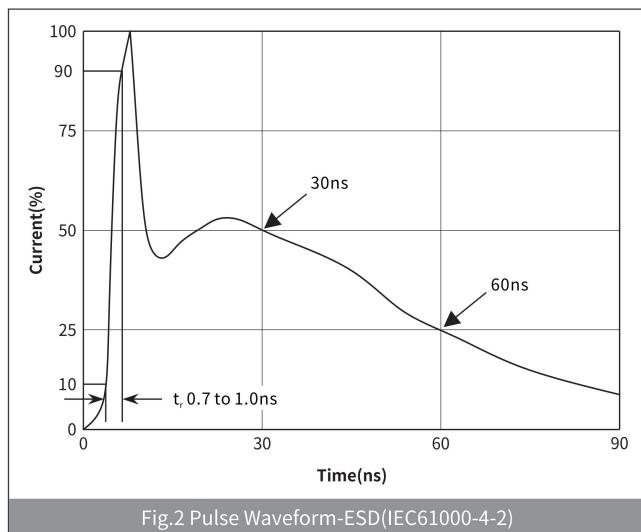
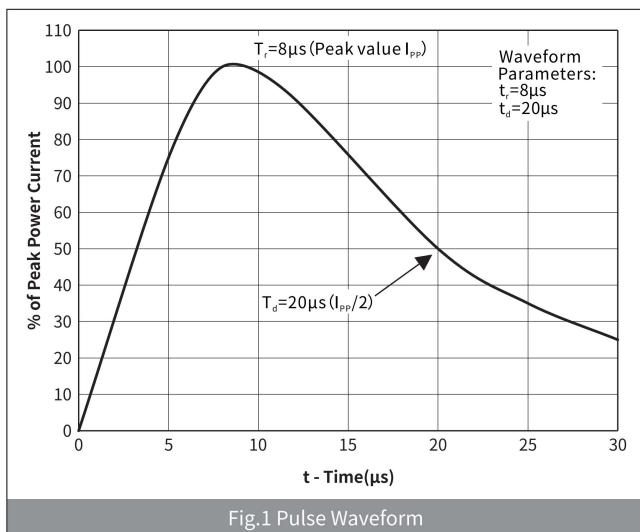
## Electrical Parameter

SYMBOL	PARAMETER
$V_C$	Clamping Voltage @ $I_{PP}$
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_{PP}$	Peak Pulse Current
$I_T$	Test Current
$I_R$	Reverse Leakage Current @ VRWM
$V_{RWM}$	Peak Reverse Working Voltage
$P_{PP}$	Peak Pulse Power Dissipation
$C_J$	Junction Capacitance @ $V_R=0\text{V}, f=1\text{MHz}$
$I_F$	Forward Current
$V_F$	Forward Voltage @ $I_F$



**Electrical Characteristics** (Ta=25°C Unless otherwise specified)

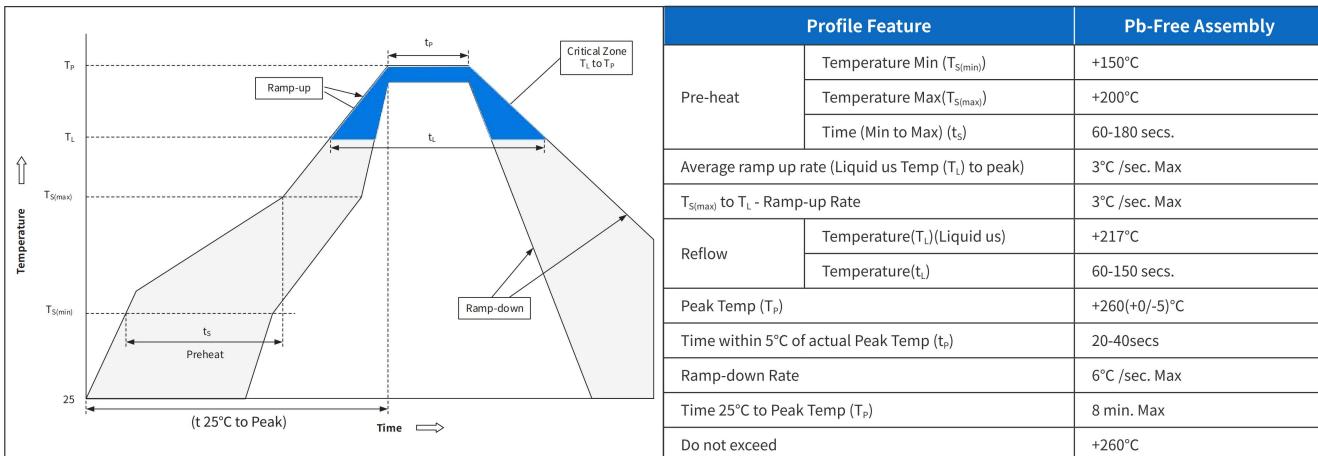
PARAMETER	SYMBOL	CONDITION	Min	Typ	Max	UNIT
Peak Reverse Working Voltage	V <sub>RWM</sub>	T <sub>a</sub> =25°C	—	—	15	V
Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> =1.0mA, T <sub>a</sub> =25°C	16.7	—	19.5	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =15V, T <sub>a</sub> =25°C	—	—	0.2	μA
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =1.0A, t <sub>p</sub> =8/20μs	—	20	—	V
		I <sub>PP</sub> =8.0A, t <sub>p</sub> =8/20μs	—	30	40	
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1MHz	—	15	20	pF

**Ratings And Characteristics Curves** (Ta=25°C Unless otherwise specified)

## Ordering Information

PREFERRED P/N	PACKAGE	SIZE(mm)	DELIVERY MODE	MPQ(PCS)
H15VL10B	DFN1006-2L	1.00×0.60×0.37	7"	3000

## Recommended Soldering Conditions



## Package Outline Dimensions (DFN1006-2L)

Symbol	Dimensions			
	Millimeters		Inches	
	Min	Max	Min	Max
A	0.950	1.050	0.037	0.041
B	0.550	0.650	0.022	0.026
C	0.350	0.450	0.014	0.018
D	0.550	0.650	0.022	0.026
D <sub>1</sub>	0.280	0.380	0.011	0.015
E	0.450	0.550	0.018	0.022
L	0.000	0.100	0.000	0.004

## Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min	Max	Min	Max
J	0.50	0.60	0.020	0.024
K	0.25	0.35	0.010	0.014
M	0.55	0.65	0.022	0.026