

OM SENI

H18VL10BS

Bi-directional 18V Low Capacitance ESD

DFN1006-2L Plastic-Encapsulate ESD Protection Diodes

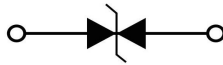
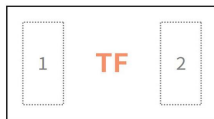
Features

- Low leakage current
- DFN1006-2L surface mount package
- IEC 61000-4-2 (ESD Air): $\pm 20\text{kV}$
- IEC 61000-4-2 (ESD Contact): $\pm 15\text{kV}$
- IEC 61000-4-5 (Lightning 8/20 μs): 7A

Applications

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

Function Diagram



Reverse Working Voltage
18V Max.

Low capacitance
0.65pF(Typ)

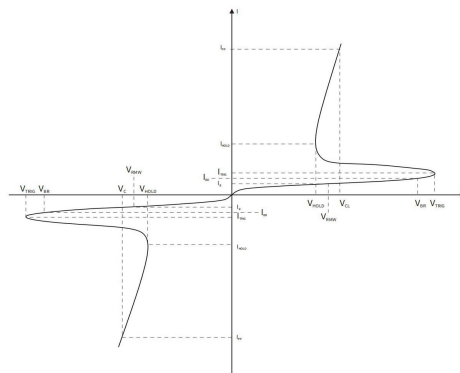


Maximum Ratings (Ta=25°C Unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{ESD}	Electrostatic Discharge Voltage	ESD per IEC 61000-4-2(Air)	± 20	KV
		ESD per IEC 61000-4-2(Contact)	± 15	KV
P_{PP}	Peak Pulse Power	$t_p = 8/20 \mu\text{s}$	56	W
I_{PP}	Rated Peak Pulse Current	$t_p = 8/20 \mu\text{s}$	7.0	A
T_J	Operating Junction Temperature Range	—	-55 to +125	°C
T_{STG}	Operating Junction Temperature Range	—	-55 to +125	°C

Electrical Parameter

SYMBOL	PARAMETER
I_{PP}	Peak Pulse Current @8/20 μs
V_C	Clamping Voltage @ I_{PP}
I_{BR} / I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
I_{TRIG}	Reverse Trigger Current
V_{TRIG}	Reverse Trigger Voltage
I_{HOLD}	Reverse Holding Current
V_{HOLD}	Reverse Holding Voltage
P_{PP}	Peak Pulse Power Dissipation

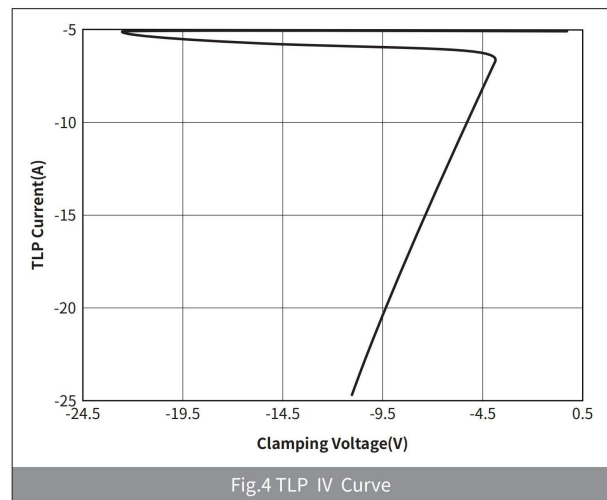
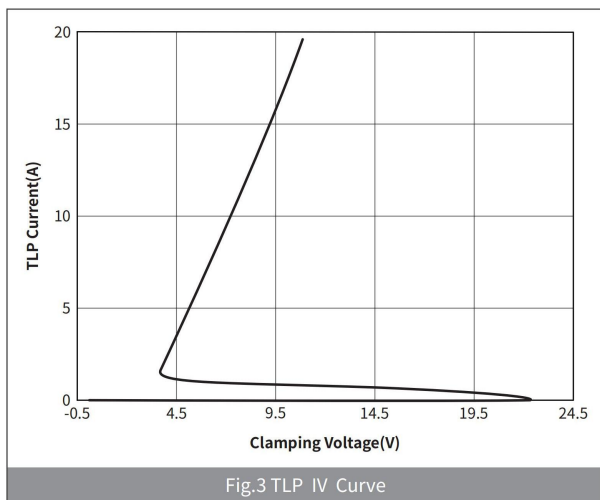
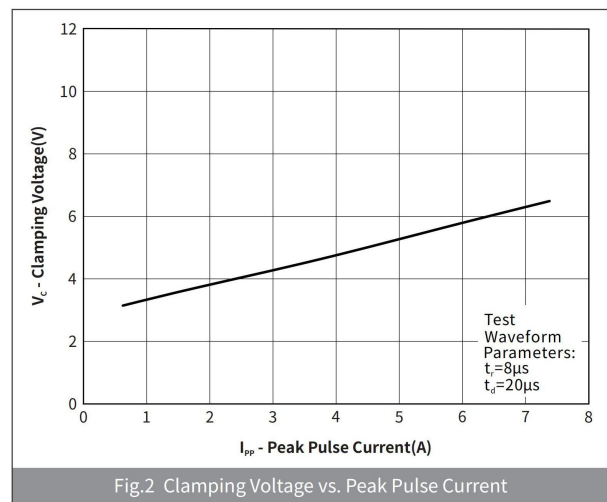
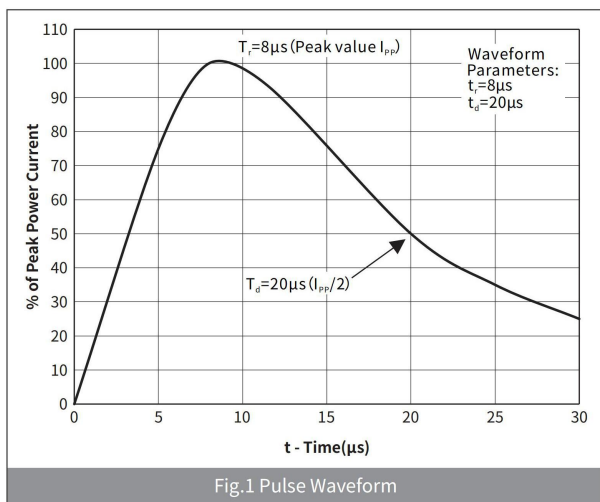


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Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	CONDITION	Min	Typ	Max	UNIT
Peak Reverse Working Voltage	V_{RWM}	$T_a=25^\circ\text{C}$	—	—	18	V
Breakdown Voltage	V_{BR}	$I_R=1\text{mA}, T_a=25^\circ\text{C}$	19	20	—	V
Reverse Leakage Current	I_R	$V_R=18\text{V}, T_a=25^\circ\text{C}$	—	—	0.5	μA
Dynamic Resistance	R_{DYN}	$TLP=0.2/100\text{ns}$	—	0.38	—	Ω
Holding Voltage	V_H	$I_H=60\text{mA}$	2.0	—	—	V
Clamping Voltage	V_C	$I_{PP}=7\text{A}, t_p=8/20\mu\text{s}$	—	—	8.0	V
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$	—	0.65	—	pF

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

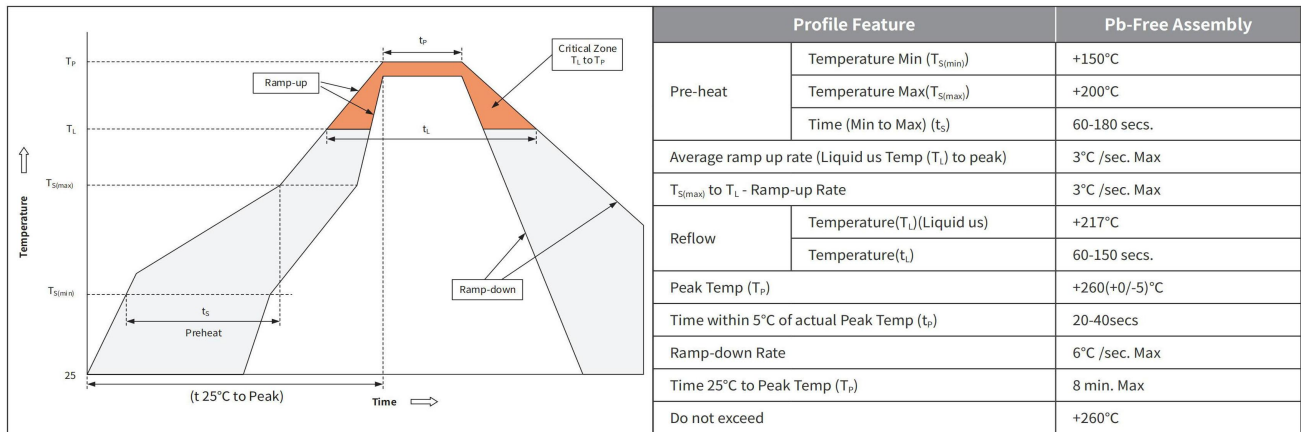


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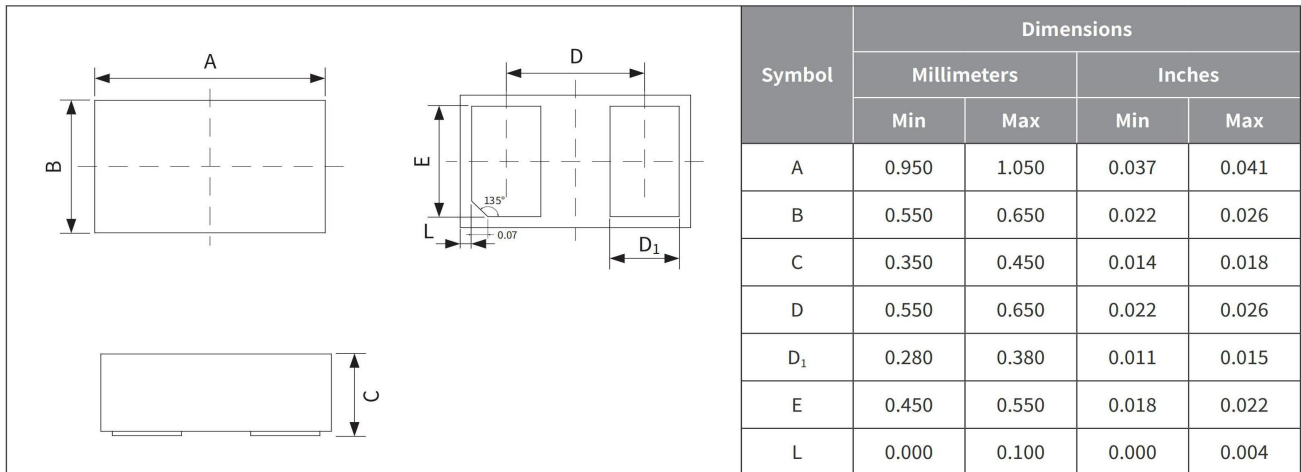
Ordering Information

PREFERRED P/N	PACKAGE	SIZE(mm)	DELIVERY MODE	MPQ(PCS)
	DFN1006-2L	1.00×0.60×0.37	7" REEL	10,000

Recommended Soldering Conditions



Package Outline Dimensions (DFN1006-2L)



Suggested Pad Layout

