

FEATURES

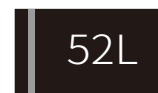
- 60W Peak Pulse Power per Line (tp=8/20μs)
- Protects two data lines
- Working voltages : 5.0 V
- Low leakage current
- Low clamping voltage

APPLICATIONS

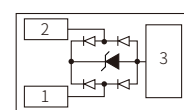
- Serial ATA
- Desktops, Servers and Notebooks
- PCI Express
- MDDI Ports
- USB Data Line Protection
- Display Ports
- Digital Visual Interfaces (DVI)



DFN1006-3L



Marking



Schematic Symbol

IEC COMPATIBILITY

- IEC61000-4-2 (ESD) ±20kV (air), ±20kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)

APPROVALS

- RoHS** Compliance with 2011/65/EU
- HF** Compliance with IEC61249-2-21:2003

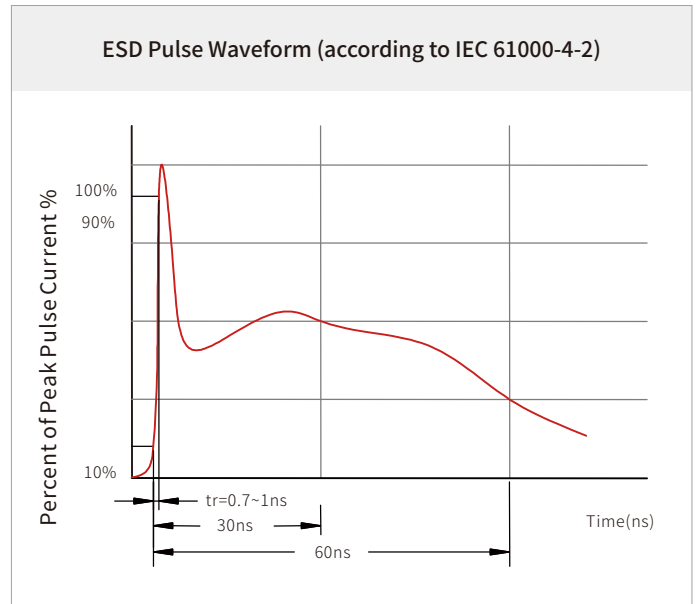
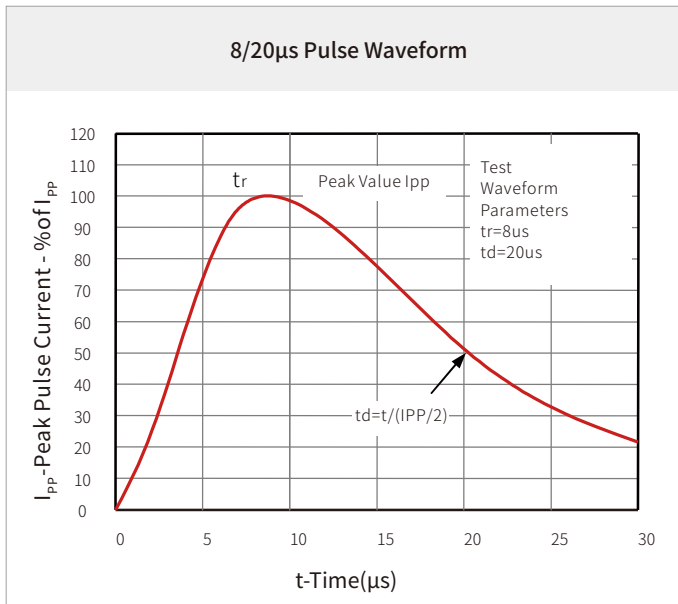
THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
P_{pp}	Peak Pulse Power (tp=8/20μs waveform)	60	Watts
T_J	Operating Temperature Range	-55 to +125	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

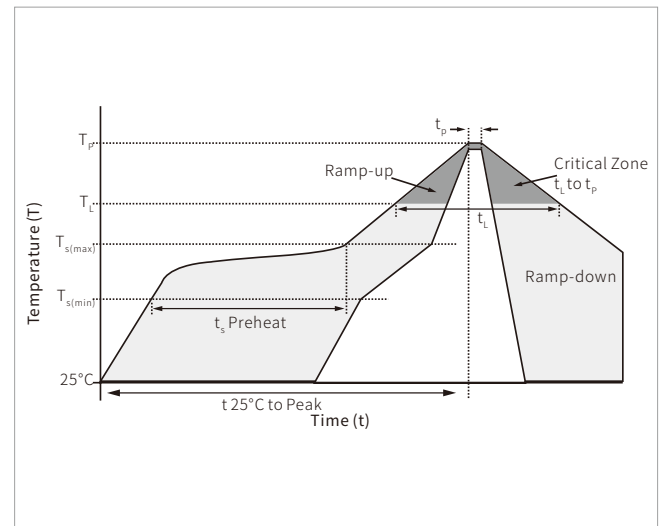
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				5.0	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1mA$	6.0			V
I_R	Reverse Leakage Current	$V_{RWM}=5V$			100	nA
V_C	Clamping Voltage	$I_{pp}=1A, tp=8/20\mu s$			10	V
V_C	Clamping Voltage	$I_{pp}=4A, tp=8/20\mu s$			15	V
I_{PP}	Peak Pulse Current	$tp=8/20\mu s$			4	A
V_F	Forward Voltage	$I_L=10mA$ I/O and GND			1.2	V
C_J	Off State Junction Capacitance	$V_R=0V, f=1MHz$ I/O and GND		0.4	0.6	pF
C_J	Off State Junction Capacitance	$V_R=0V, f=1MHz$ I/O and I/O		0.2	0.3	pF

CHARACTERISTIC CURVES

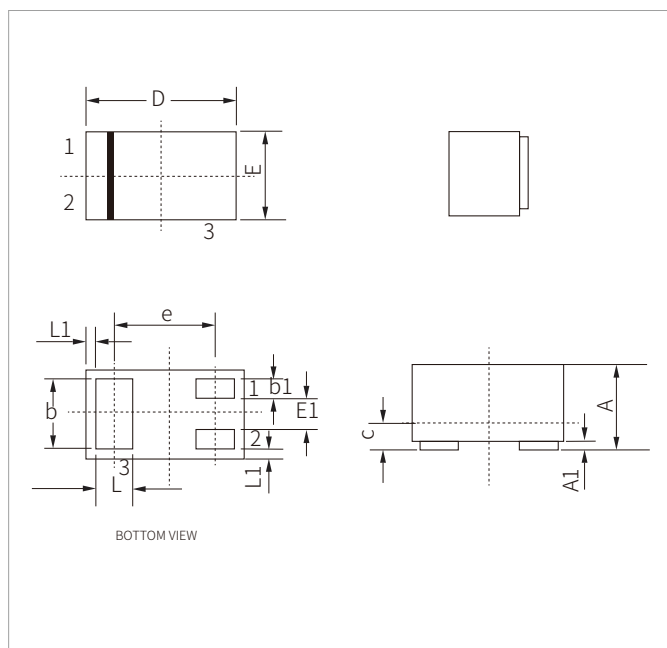


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

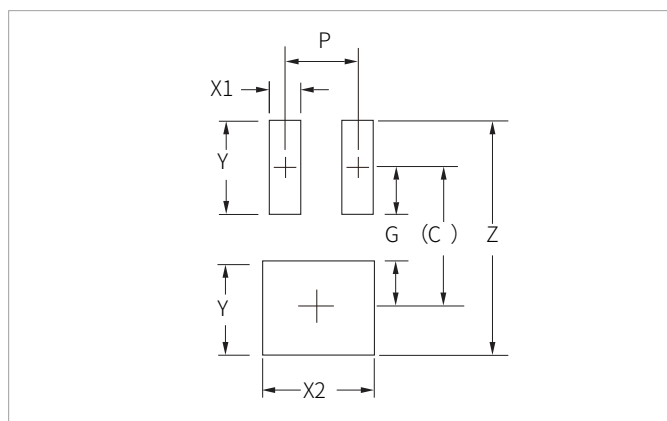


DFN1006-3L PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.35	0.60	0.014	0.024
A1	0	0.05	0	0.002
b	0.45	0.55	0.018	0.022
b1	0.10	0.20	0.004	0.008
c	0.12	0.18	0.005	0.007
D	0.95	1.05	0.037	0.041
e	0.65BSC		0.026BSC	
E	0.55	0.70	0.022	0.027
E1	0.20	0.30	0.008	0.014
L	0.20	0.30	0.008	0.012
L1	0.05REF		0.002REF	

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
C	(0.85)	(0.033)
P	0.40	0.016
G	0.30	0.012
X1	0.20	0.008
X2	0.60	0.024
Y	0.55	0.022
Z	1.40	0.055

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SE10P3F06U5.0MA	DFN1006-3L	10000PCS	7"

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By QR Code

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