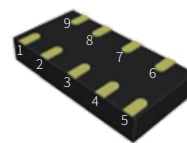


FEATURES

- | 60W Peak Pulse Power per Line (tp=8/20μs)
- | Package optimized for high-speed lines
- | Protects eight data lines
- | Low leakage current
- | Low clamping voltage
- | Each I/O pin can withstand over 1000 ESD strikes for ±8KV contact discharge

APPLICATIONS

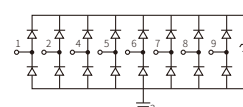
- | SATA and eSATA interface
- | LVDS interfaces
- | Desktops, Servers and Notebooks
- | MDDI Ports
- | Display Ports
- | High Definition Multi-Media Interface (HDMI)
- | Digital Visual Interface (DVI)



DFN3810-9L

0508P

Marking



Schematic Symbol

IEC COMPATIBILITY

- | IEC61000-4-2 (ESD) ±25kV (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

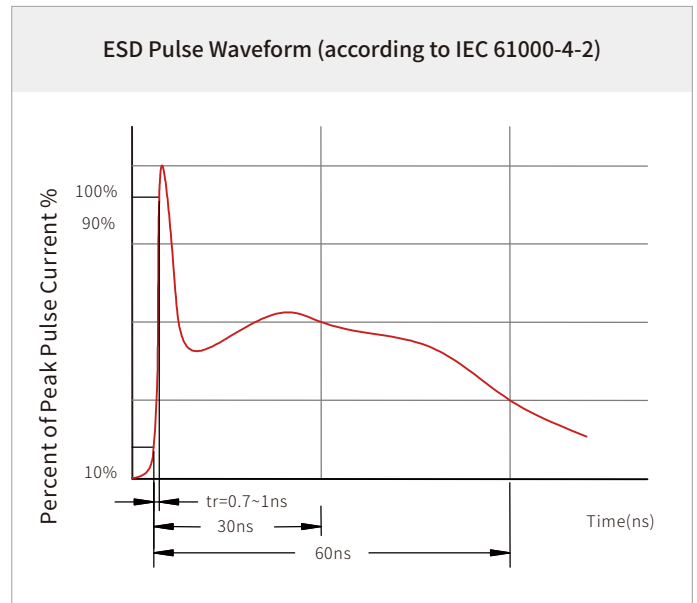
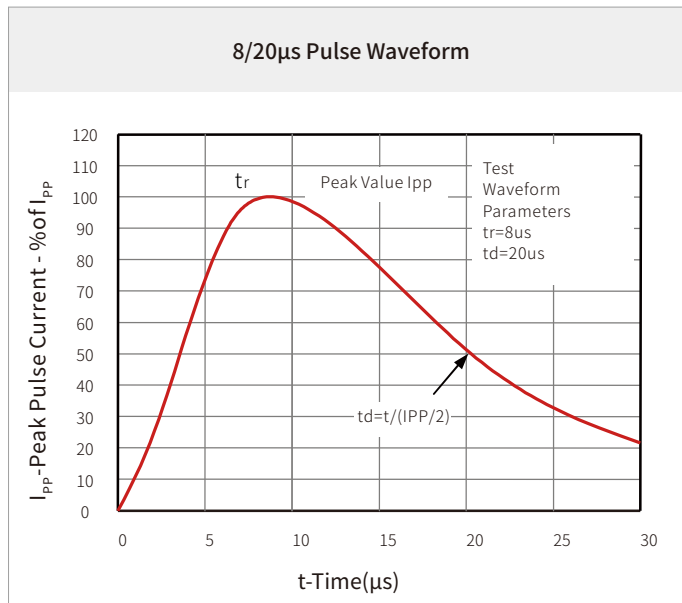
Symbol	Parameter	Value	Unit
P_{pp}	Peak Pulse Power (tp=8/20μs waveform)	60	Watts
T_J	Operating Temperature Range	-55 to +125	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

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		9.0	V
I_R	Reverse Leakage Current	$V_{RWM}=5V$			1.0	μA
V_C	Clamping Voltage	$I_{pp}=1A, tp=8/20μs$			10	V
V_C	Clamping Voltage	$I_{pp}=4A, tp=8/20μs$			15	V
I_{pp}	Peak Pulse Current	tp=8/20μs			4	A
C_J	Off State Junction Capacitance	$V_R=0V, f=1MHz$ I/O-GND		0.4	0.5	pF
C_J	Off State Junction Capacitance	$V_R=0V, f=1MHz$ I/O-I/O		0.2	0.3	pF

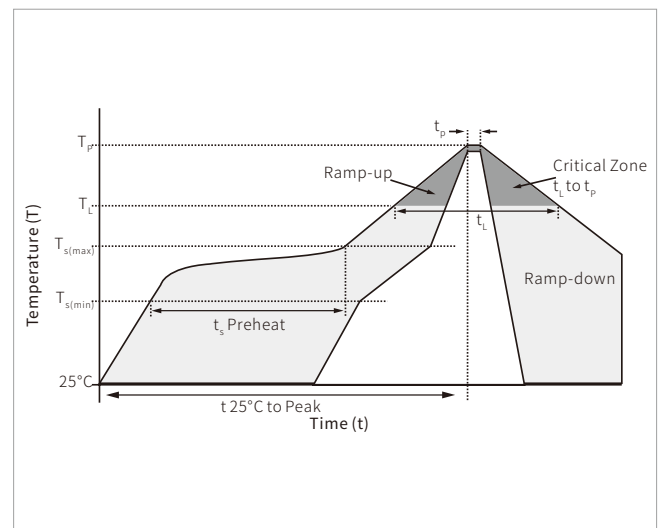
Note: I/O pins are pin 1,2,4,5, 6,7,8,9; GND pins are pin 3.

CHARACTERISTIC CURVES

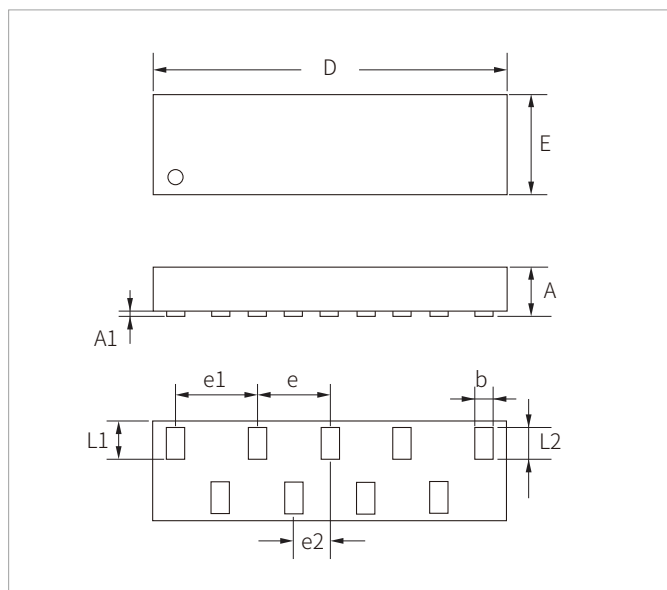


SOLDERING PARAMETERS

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



DFN3810-9L PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.47	0.53	0.019	0.021
A1	0	0.05	0.000	0.002
b	0.15	0.25	0.006	0.010
D	3.70	3.90	0.146	0.154
E	0.90	1.10	0.035	0.043
e	0.80		0.031	
e1	0.90		0.035	
e2	0.40		0.016	
L1	0.025	0.075	0.001	0.003
L2	0.25	0.35	0.010	0.014

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SE38F06U5.0UH	DFN3810-9L	3000PCS	7"

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