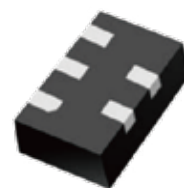


FEATURES

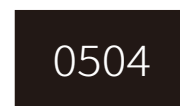
- | 60 Watts Peak Pulse Power per Line (tp=8/20μs)
- | Package optimized for high-speed lines
- | Protects four data lines
- | Low leakage current
- | Low clamping voltage

APPLICATIONS

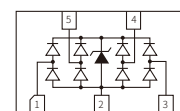
- | Serial ATA
- | PCI Express
- | Desktops, Servers and Notebooks
- | MDDI Ports
- | USB 2.0/3.0 Power and Data Line
- | Protection Display Ports
- | High Definition Multi-Media Interface (HDMI)
- | Digital Visual Interface (DVI)



DFN1308-5L



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

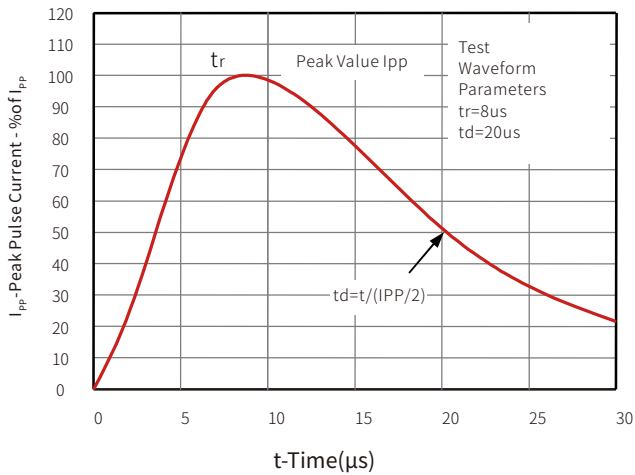
ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Working 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
$V_{CTL P}$	TLP Clamping Voltage	TLP $I_{PP}=8A, tp=100ns$		16		V
$V_{CTL P}$	TLP Clamping Voltage	TLP $I_{PP}=16A, tp=100ns$		23		V
I_{PP}	Peak Pulse Current	tp=8/20μs			4	A
C_J	Junction Capacitance	$V_R=0V, f=1MHz$ I/O and GND		0.4	0.5	pF
C_J	Junction Capacitance	$V_R=0V, f=1MHz$ I/O and I/O		0.2	0.3	pF

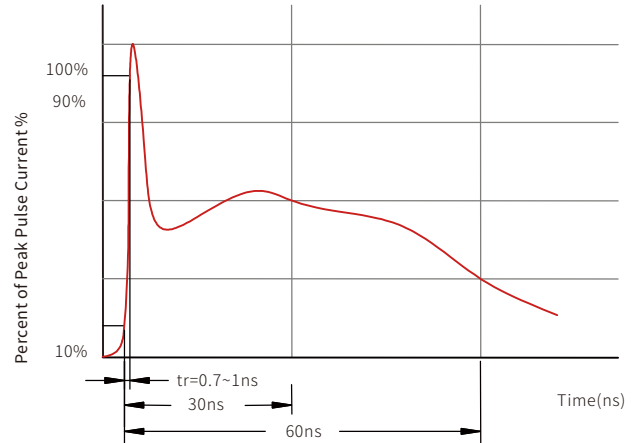
Note: I/O are pin 1,3,4,5, GND is pin2.

CHARACTERISTIC CURVES

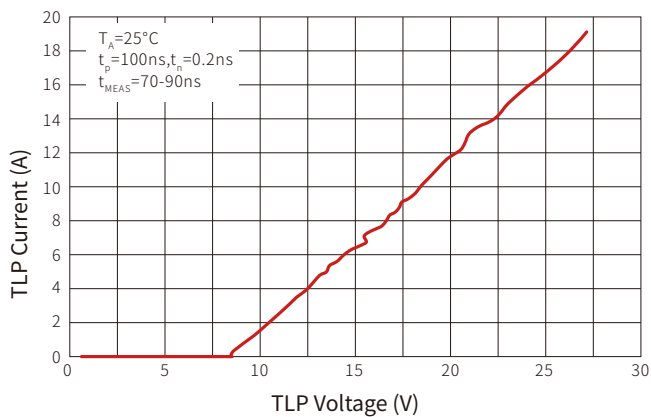
8/20 μ s Pulse Waveform



ESD Pulse Waveform (according to IEC 61000-4-2)

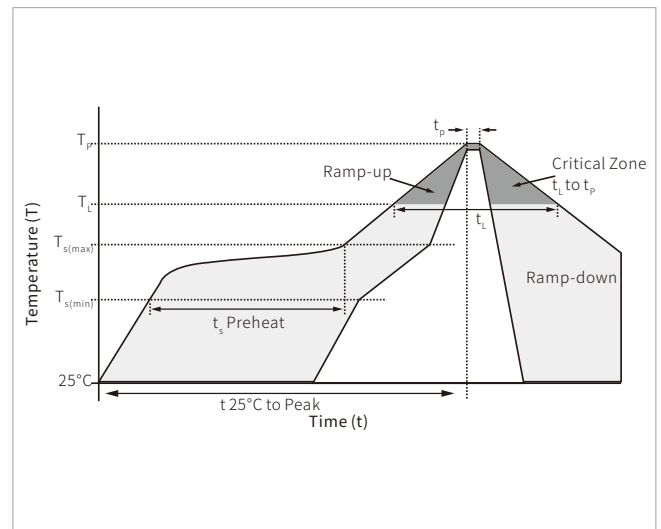


Transmission Line Pulsing (TLP) Measurement

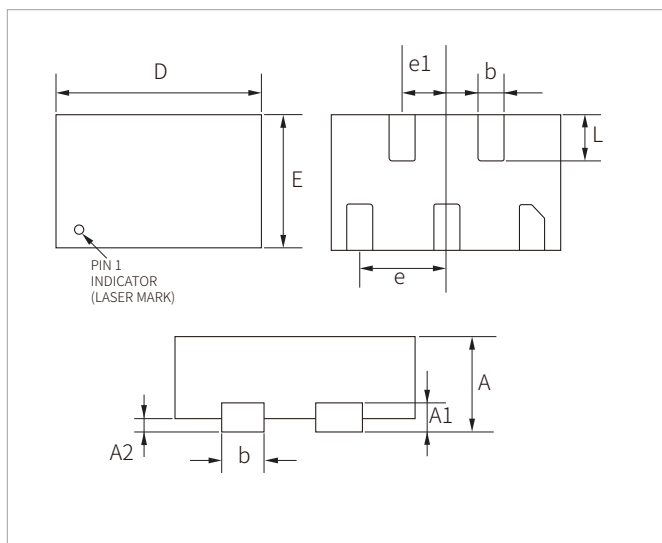


SOLDERING PARAMETERS

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



DFN1308-5L PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
D	1.20	1.40	0.047	0.055
E	0.70	0.90	0.028	0.035
L	0.20	0.30	0.008	0.012
b	0.10	0.30	0.004	0.012
e	0.50		0.020	
e1	0.25		0.010	
A	0.40	0.60	0.016	0.024
A1	0.15		0.006	
A2	0	0.05	0	0.002

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SE13P5F06U5.0UD-SP	DFN1308-5L	10000PCS	7"

Headquarters

No.3387 Shendu Road
Pujiang I&E Park
Minhang Shanghai China
201000

Hotline

400-021-5756

Web

<https://www.semiware.com>

Sales Center

Tel: 86-21-3463-7458
Email: sales18@semiware.com

Customer Service

Tel: 86-21-5484-1001
Email: sales17@semiware.com

Technical Support

Tel: 86-21-3463-7654
Email: fae01@semiware.com

Complaint & Suggestions

Tel: 86-21-3463-7172
Ext: 8868
Email: cs03@semiware.com

By QR Code

Website



Wechat

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