

## FEATURES

- | 100W Peak Pulse Power per Line (tp=8/20μs)
- | Protects one signal line or I/O port
- | Working voltages : 3.3V
- | Low leakage current
- | Low clamping voltage

## APPLICATIONS

- | Cell Phone Handsets and Accessories
- | Microprocessor based equipment
- | Personal Digital Assistants (PDA' s)
- | Notebooks, Desktops, and Servers
- | Portable Instrumentation
- | Peripherals
- | Pagers


**DFN1006**

**Marking**

**Schematic Symbol**

## IEC COMPATIBILITY

- | IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact)
- | IEC61000-4-4 (EFT) 40A (5/50ns)

## APPROVALS

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

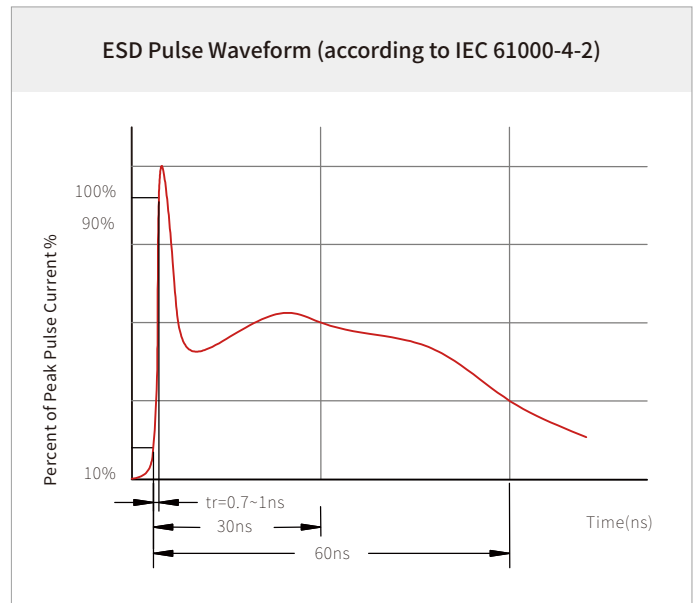
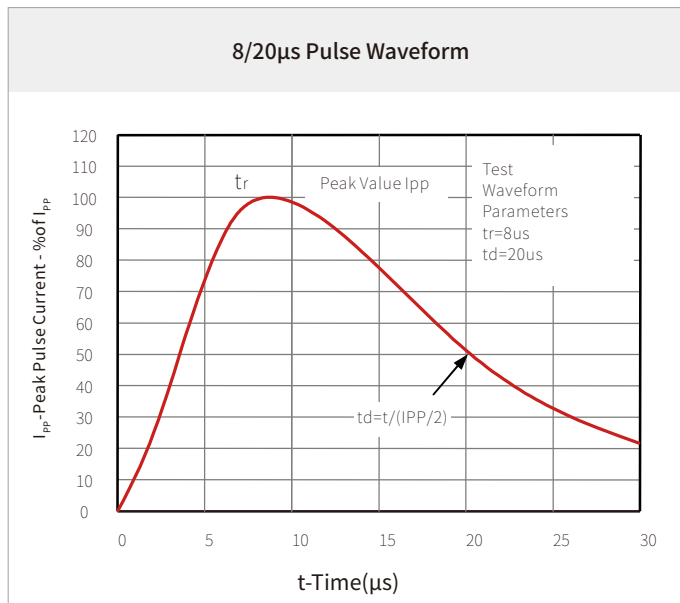
## THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
P <sub>PP</sub>	Peak Pulse Power (tp=8/20μs waveform)	100	Watts
T <sub>J</sub>	Operating Temperature Range	-55 to +125	°C
T <sub>STG</sub>	Storage Temperature Range	-55 to +150	°C

## ELECTRICAL CHARACTERISTICS

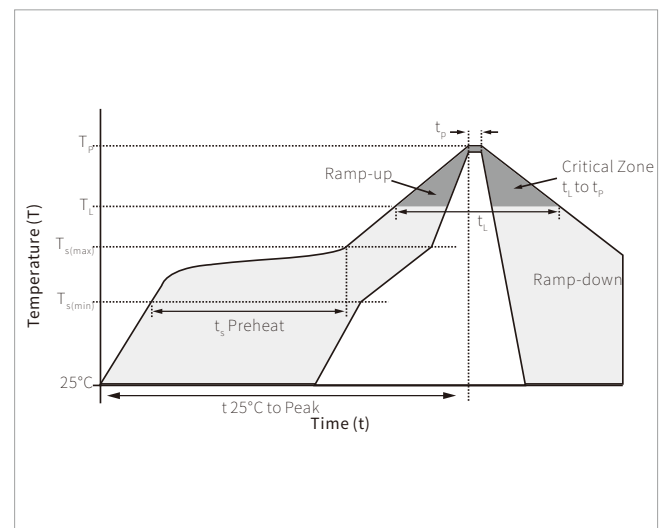
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V <sub>RWM</sub>	Reverse Stand-off Voltage				3.3	V
V <sub>BR</sub>	Reverse Breakdown Voltage	I <sub>T</sub> =1mA	3.5			V
I <sub>R</sub>	Reverse Leakage Current	V <sub>RWM</sub> =3.3V			0.5	μA
V <sub>C</sub>	Clamping Voltage	I <sub>PP</sub> =1A, tp=8/20us			6.5	V
V <sub>C</sub>	Clamping Voltage	I <sub>PP</sub> =8A, tp=8/20us			10	V
I <sub>PP</sub>	Peak Pulse Current	tp=8/20us			8	A
C <sub>J</sub>	Off State Junction Capacitance	V <sub>R</sub> =0V, f=1MHz		12		pF

## CHARACTERISTIC CURVES

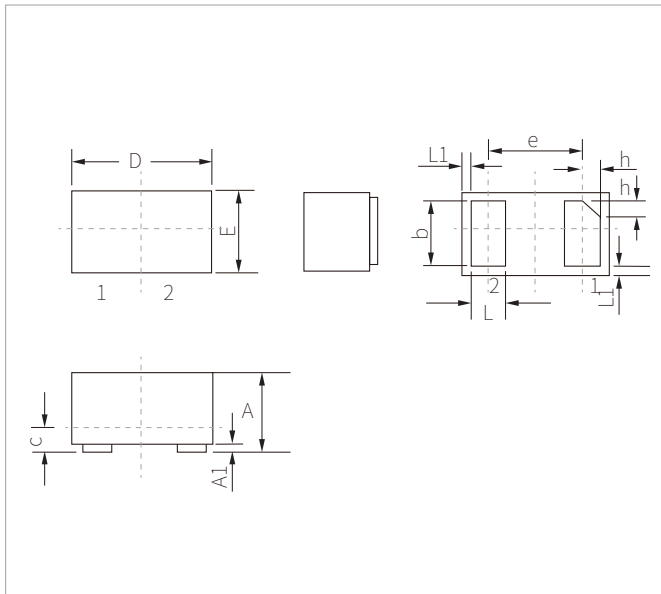


## SOLDERING PARAMETERS

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

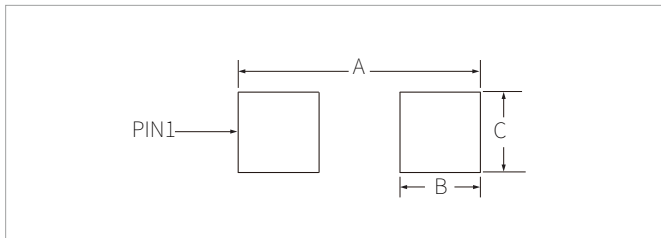


## DFN1006 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.35	0.50	0.014	0.020
A1	0	0.05	0	0.002
b	0.40	0.55	0.016	0.022
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
L	0.20	0.35	0.008	0.014
L1	0.05REF		0.002REF	
h	0.07	0.17	0.003	0.007

## RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
A	1.20	0.047
B	0.47	0.019
C	0.60	0.024

## ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SE10F10B3.3A	DFN1006	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](mailto:sales18@semiware.com)

**Customer Service**

Tel: 86-21-5484-1001  
Email: [sales17@semiware.com](mailto:sales17@semiware.com)

**Technical Support**

Tel: 86-21-3463-7654  
Email: [fae01@semiware.com](mailto:fae01@semiware.com)

**Complaint & Suggestions**

Tel: 86-21-3463-7172  
Ext: 8868  
Email: [cs03@semiware.com](mailto:cs03@semiware.com)

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