

## FEATURES

- | 140Watts peak pulse power (tp = 8/20μs)
- | Ultra low leakage: nA level
- | Low clamping voltage

## APPLICATIONS

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



DFN0603



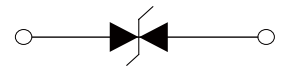
Marking

## IEC COMPATIBILITY

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

## APPROVALS

<b>RoHS</b>	Compliance with 2011/65/EU
<b>HF</b>	Compliance with IEC61249-2-21:2003



Schematic Symbol

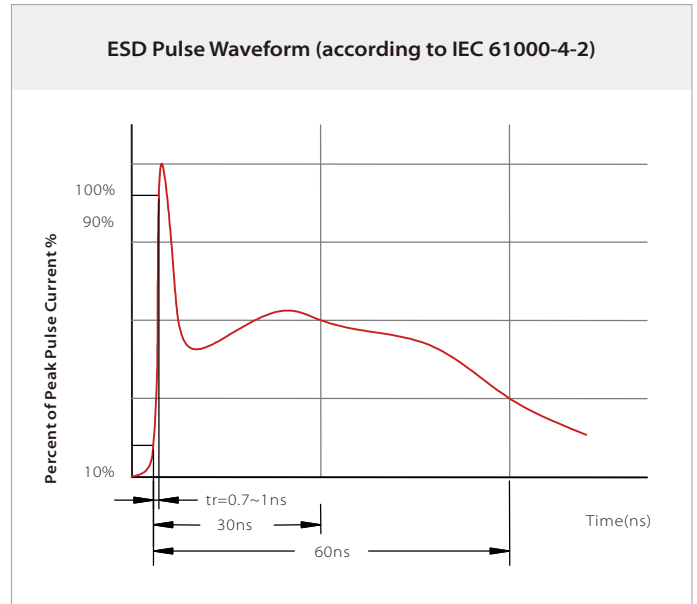
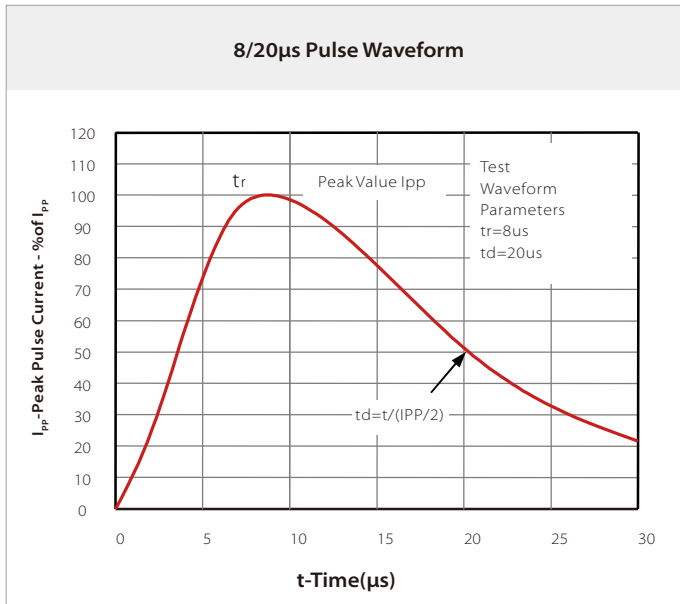
## THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
$P_{PP}$	Peak Pulse Power (tp=8/20μs waveform)	140	Watts
$T_J$	Operating Temperature Range	-40 to +125	°C
$T_{STG}$	Storage Temperature Range	-55 to +150	°C

## ELECTRICAL CHARACTERISTICS

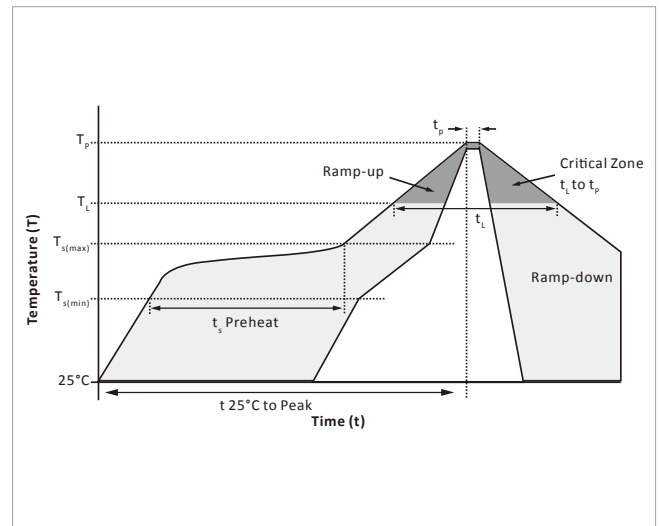
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
$V_{RWM}$	Reverse Stand-off Voltage				12	V
$V_{BR}$	Reverse Breakdown Voltage	$I_T=1mA$	13	14	16	V
$I_R$	Reverse Leakage Current	$V_{RWM}=12V$		<10	100	nA
$V_C$	Clamping Voltage (Tp=8/20us)	$I_{pp}=1A, tp=8/20us$		15.6	18	V
$V_C$	Clamping Voltage (Tp=8/20us)	$I_{pp}=7A, tp=8/20us$		16	20	V
$I_{PP}$	Peak Pulse Current (Tp=8/20us)	tp=8/20us			7	A
$C_J$	Off State Junction Capacitance	$V_R=0V, f=1MHz$		8	12	pF

## CHARACTERISTIC CURVES

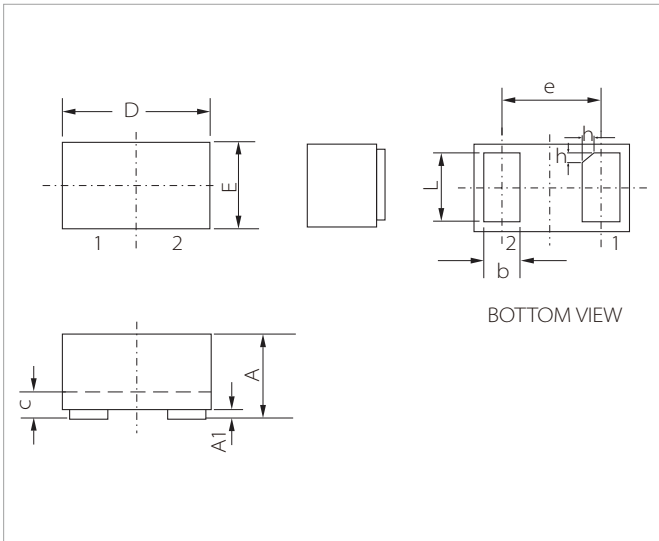


## SOLDERING PARAMETERS

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) ( $t_r$ )	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

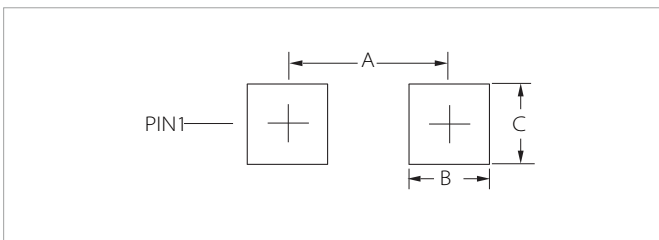


## DFN0603 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.28	0.34	0.011	0.014
A1	0	0.05	0	0.002
b	0.13	0.24	0.005	0.009
c	0.05	0.15	0.002	0.006
D	0.55	0.65	0.022	0.026
e	0.35BSC		0.014BSC	
E	0.25	0.35	0.010	0.014
L	0.20	0.30	0.008	0.012
h	0	0.10	0	0.004

## RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
A	0.38	0.015
B	0.23	0.009
C	0.30	0.012

## ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SE06F10B12LA	DFN0603	10000PCS	7"

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