

FEATURES

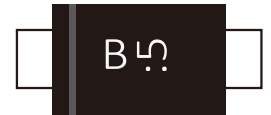
- | Protects one Bidirectional I/O line
- | Low clamping voltage
- | Working voltages : 3.3 V
- | Low Leakage current

APPLICATIONS

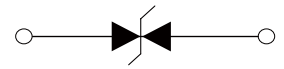
- | Cellular Handsets and Accessories
- | Personal Digital Assistants
- | Notebooks and Handhelds
- | Portable Instrumentation
- | Digital Cameras
- | Peripherals
- | Audio Players
- | Keypads, Side Keys, LCD Displays



SOD-923



Marking



Schematic Symbol

IEC COMPATIBILITY

- | IEC61000-4-2 (ESD) $\pm 30\text{kV}$ (air), $\pm 30\text{kV}$ (contact)
- | IEC61000-4-4 (EFT) 40A (5/50ns)

APPROVALS

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

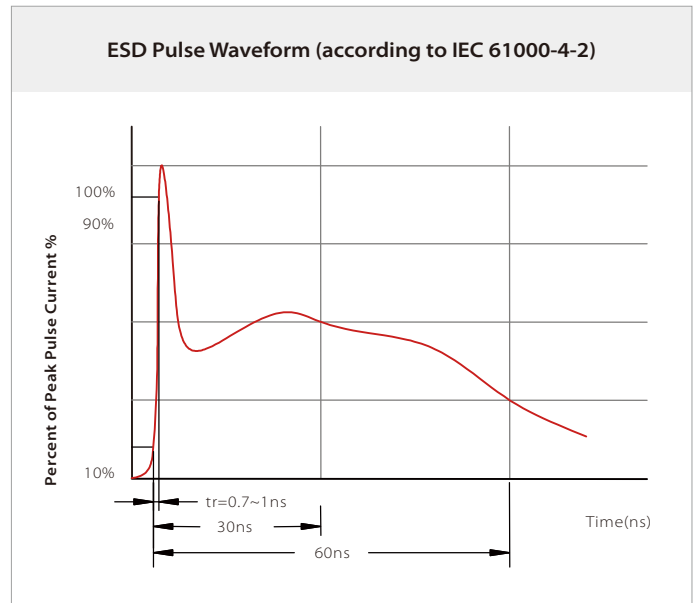
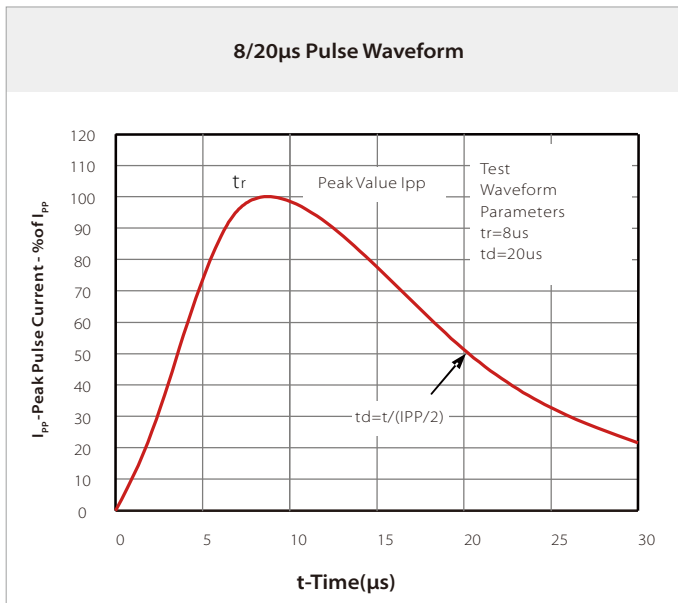
THERMAL CONSIDERATIONS

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

ELECTRICAL CHARACTERISTICS

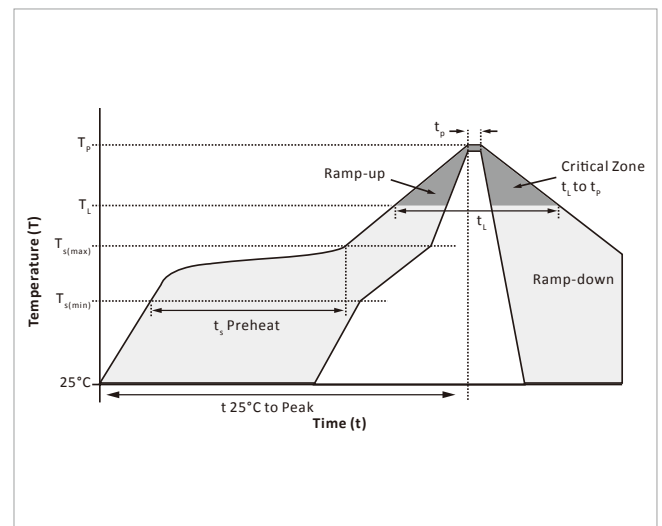
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				3.3	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1\text{mA}$	4.5	5.2	6.5	V
I_R	Reverse Leakage Current	$V_{RWM}=3.3\text{V}$			200	nA
V_C	Clamping Voltage (Tp=8/20us)	$I_{pp}=1\text{A}, tp=8/20\text{us}$			7	V
V_C	Clamping Voltage (Tp=8/20us)	$I_{pp}=8\text{A}, tp=8/20\text{us}$			9	V
I_{PP}	Peak Pulse Current (Tp=8/20us)	tp=8/20us			8	A
C_J	Off State Junction Capacitance	$V_R=0\text{V}, f=1\text{MHz}$		15		pF

CHARACTERISTIC CURVES

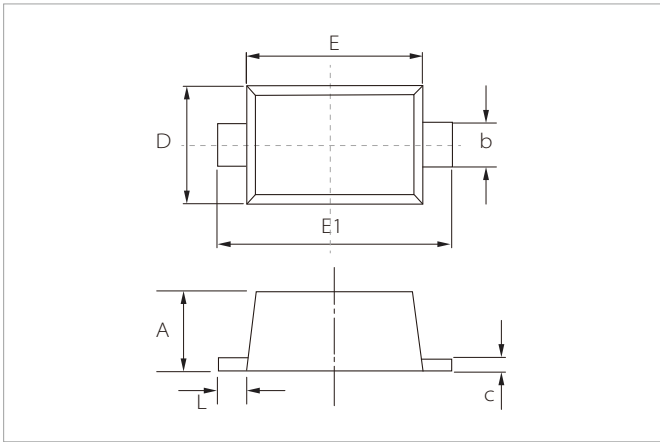


SOLDERING PARAMETERS

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

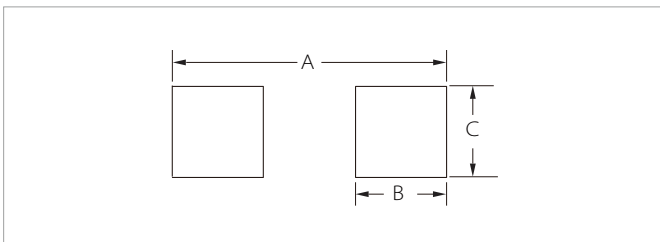


SOD-923 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.34	0.45	0.013	0.002
b	0.15	0.3	0.006	0.012
c	0.07	0.15	0.003	0.006
D	0.55	0.65	0.022	0.026
E	0.70	0.90	0.028	0.036
E1	0.90	1.10	0.036	0.044
L	0.05	0.15	0.002	0.006

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
A	1.10	0.043
B	0.30	0.012
C	0.40	0.016

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SE9D10B3.3A	SOD-923	8000PCS	7"

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