

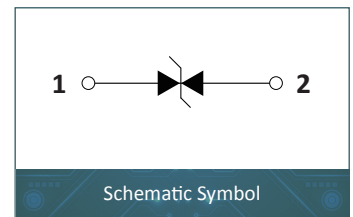
## 1. FEATURES

- 100W Peak Pulse Power per Line (tp=8/20μs)
- Protects one unidirectional I/O line
- Low clamping voltage
- Working voltages : 5.0V
- Low leakage current
- Ultra Low capacitance



## 2. APPLICATIONS

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Industrial Controls
- Notebooks, Desktops, and Servers
- Instrumentation
- USB ports
- Display Ports



## 3. IEC COMPATIBILITY

- IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)

## 4. THERMAL CONSIDERATIONS

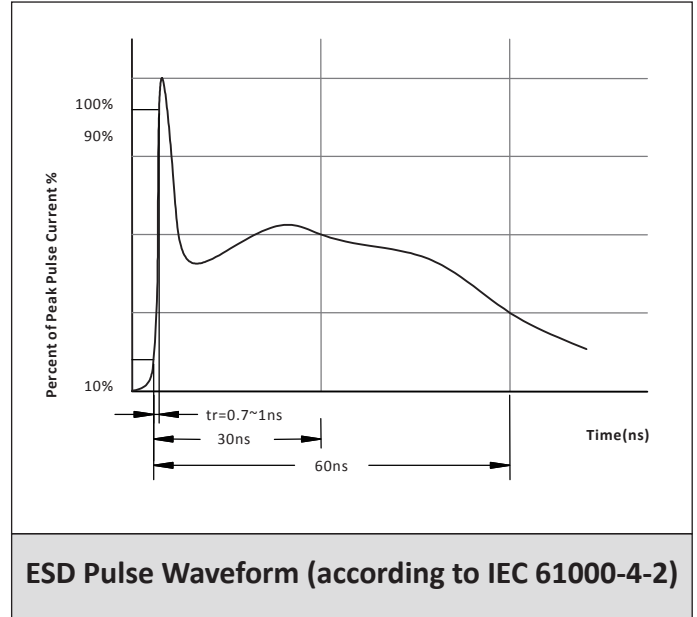
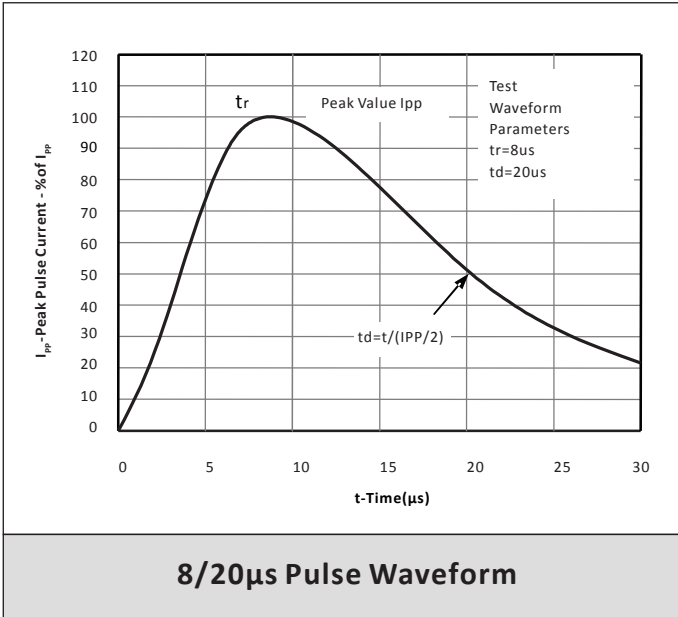
Symbol	Parameter	Value	Unit
$P_{PP}$	Peak Pulse Power (tp=8/20μs waveform)	100	Watts
$T_J$	Operating Temperature Range	-55 to +150	°C
$T_{STG}$	Storage Temperature Range	-55 to +150	°C

## 5. ELECTRICAL CHARACTERISTICS

Part Number	Device Marking Code	$V_{RWM}$	$V_{BR}$	$I_T$	$V_C@1A$	$V_C$		$I_R$	$C_T$
		Max.(V)	Min.(V)	(mA)	Max.(V)	Max.(V)	@A	Max.(μA)	Typ.(pF)
SE5D10B5.0MA	L5orLB	5.0	5.6	1.0	10.5	14.0	2.0	2.0	1.0

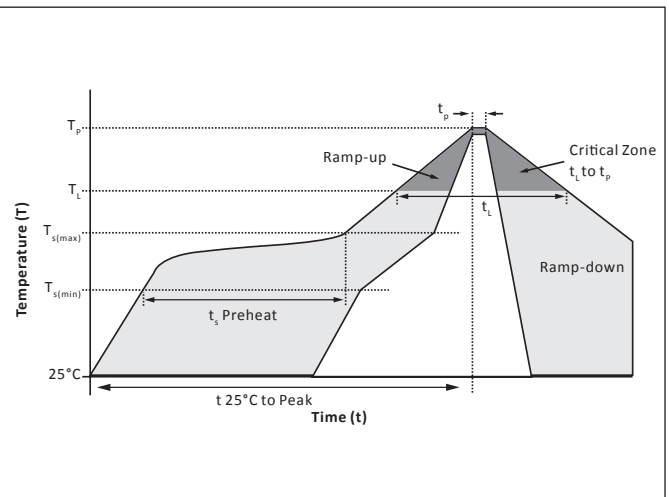


## 6. CHARACTERISTIC CURVES



## 7. 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



## 8. SOD-523 PACKAGE INFORMATION

DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.50	0.70	0.020	0.028
b	0.25	0.35	0.010	0.014
c	0.07	0.20	0.0028	0.0079
D	0.70	0.90	0.028	0.035
E	1.10	1.30	0.043	0.051
E1	1.50	1.70	0.059	0.067
L	0.15	0.25	0.006	0.010

## 9. RECOMMENDED PAD LAYOUT DIMENSIONS

DIM	Millimeters	Inches
A	2.00	0.0787
B	0.60	0.0236
C	0.70	0.0276

## 10. ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SE5D10B5.0MA	SOD-523	3000PCS	7"



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