

## FEATURES

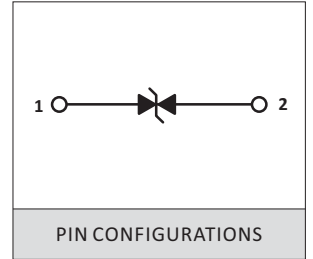
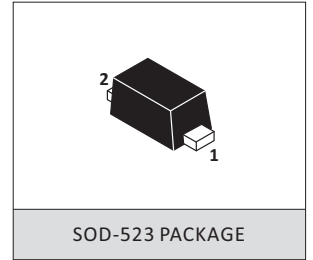
- > Protects one bidirectional I/O line
- > Low clamping voltage
- > Working voltages : 3.3V
- > Low leakage current

## APPLICATIONS

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

## IEC COMPATIBILITY

- > IEC61000-4-2 (ESD)  $\pm 25\text{kV}$  (air),  $\pm 20\text{kV}$  (contact)
- > IEC61000-4-4 (EFT) 40A (5/50ns)



## MAXIMUM RATINGS AND CHARACTERISTICS Ratings at 25°C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Operating Temperature Range.	T <sub>J</sub>	-55~+125	°C
Storage Temperature Range.	T <sub>STG</sub>	-55~+150	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

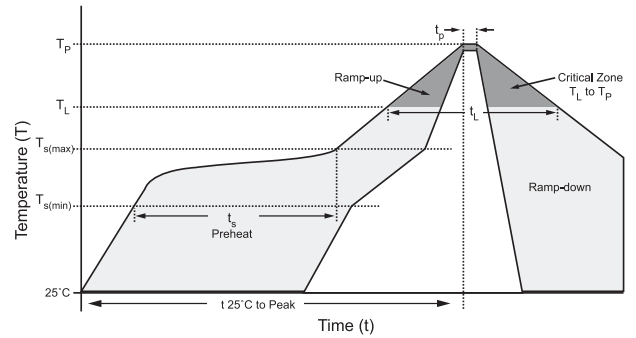
## ELECTRICAL CHARACTERISTICS

PART NUMBER	DEVICE MARKING CODE	V <sub>RWM</sub>	V <sub>B</sub>	I <sub>T</sub>	V <sub>c</sub> @1A	V <sub>c</sub>		I <sub>R</sub>	C <sub>T</sub>
		(V) Max.	(V) Min.	(mA)	Typ.	Max.	@A	( $\mu\text{A}$ ) Max.	(pF) Typ.
SE5D10B3.3A	3C	3.3	4.0	1	5	12.0	7.0	1.0	10

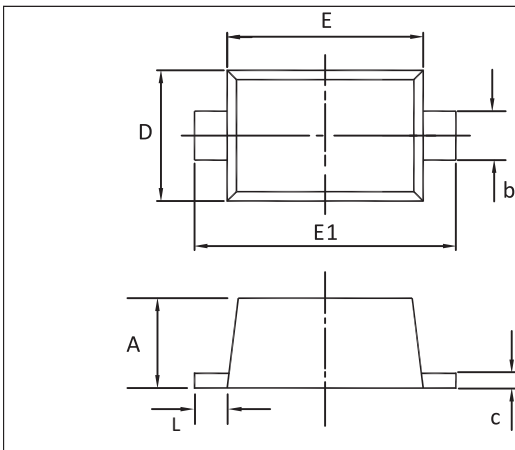


## REFLOW PROFILE

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Min (Ts(min))	150°C
	Temperature Max (Ts(max))	200°C
	Time (min to max) (ts)	60 – 180 secs
Average ramp up rate (Liquidus Temp (TL) to peak)		3°C/second max
Ts(max) to TL - Ramp-up Rate		3°C/second max
Reflow	Temperature (TL) (Liquidus)	217°C
	Time (min to max) (tl)	60 – 150 seconds
Peak Temperature (Tp)		260°C
Time within 5°C of actual peak Temperature (tp)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (Tp)		8 minutes Max.
Do not exceed		260°C

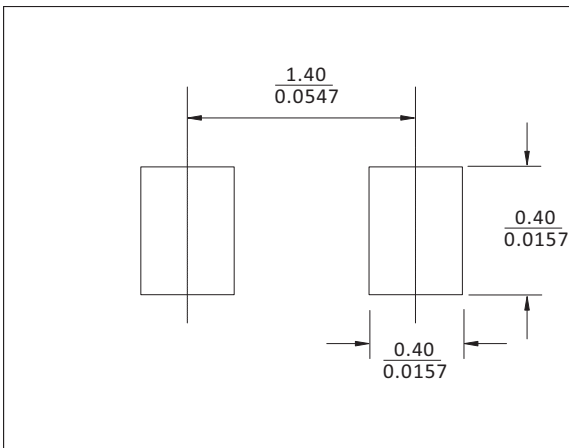


## PRODUCT DIMENSIONS



Symbol	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

## RECOMMENDED PAD LAYOUT DIMENSIONS



**Notes:**

This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.



**ORDERING INFORMATION**

Part Number	Component Package	QTY/Reel	Reel Size
SE5D10B3.3A	SOD-523	3000PCS	7"

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