# <sup>¤</sup>**@**REATEK

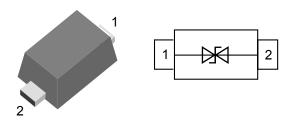
## CESD923LC3V3B

## **CREATEK Microelectronics**

## **ESD Protection Diode in SOD-923**

#### Features

- 100 Watts peak pulse power (tp = 8/20µs)
- Tiny SOD923 package
- Bidirectional configurations
- Protects one I/O port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2 ±30KV contact ±30KV air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 8A (8/20 µs)



### **Mechanical Data**

- Case: SOD923 (plastic package). Lead free; RoHS compliant
- Molding Compound Flammability Rating: UL 94 V-0
- **Terminals:** High temperature soldering guaranteed: 260 °C/10 sec. at terminals

## Computers and peripheralsCommunication systems

Notebook

Applications

- Cellular handsets and accessories
- Portable electronics
- Audio and video equipment

### **Absolute Maximum Ratings**

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
ESD Air Discharge per IEC 61000-4-2	V <sub>ESD</sub>	± 30	kV
ESD Contact Discharge per IEC 61000-4-2	V <sub>ESD</sub>	± 30	kV
Peak pulse power 8/20 µs waveform	P <sub>PPM</sub>	100	W
Peak pulse current 8/20 µs waveform	I <sub>PPM</sub>	8	А
Operating Temperature	TJ	- 55 to + 125	°C
Storage Temperature	T <sub>STG</sub>	- 55 to + 150	°C

### **Electrical Characteristics**

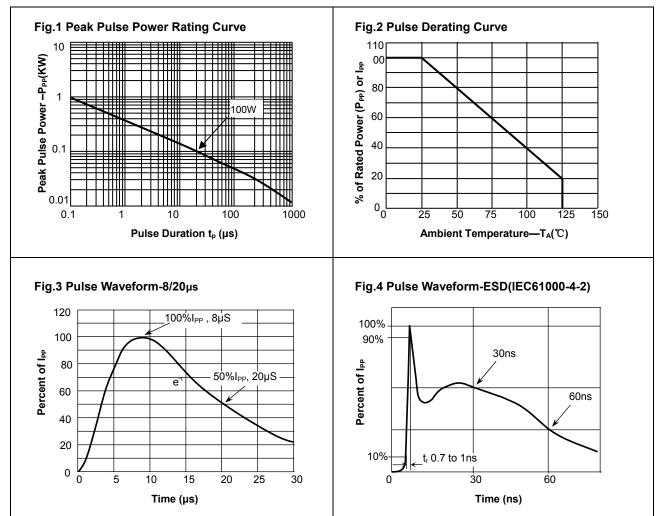
(T<sub>A</sub> = 25 °C unless otherwise specified)

Parameter	Test Conditions	Synbol	Min.	Тур.	Max.	Unit
Reverse Stand-Off Voltage		V <sub>RWM</sub>			3.3	V
Max. Reverse current	at V <sub>R</sub> = 3.3 V	IR		< 0.1	1	μA
Max. Clamping voltage	at I <sub>PP</sub> = 8 A, Acc. IEC 61000-4-5	V <sub>C</sub>			13	V
Min. Reverse Breakdown Voltage	at I <sub>R</sub> = 1 mA	V <sub>BR</sub>	5.1	5.8	8.0	V
Capacitance	at V <sub>R</sub> = 0 V ; f = 1 MHz	C <sub>D</sub>		6		pF



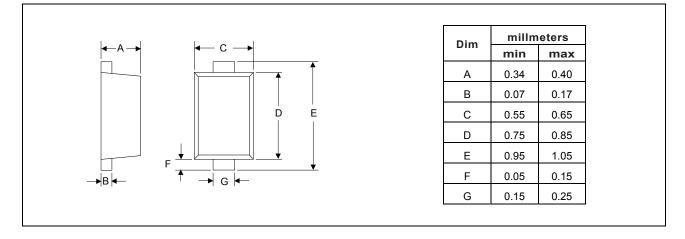
## CESD923LC3V3B

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## Typical Characteristics ( $T_{amb} = 25 \text{ °C}$ unless otherwise specified)

### Package Dimensions





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### Part number system

	CES D923 LC 3V3 B
Product series (ESD)	
Package (SOD-923)	
Capacitance type (Low capacitance)	
Working voltage (3.3V)	
Directional (Bidirectional)	

## **Ordering inormation**

Order code	Package	Packaging option	Base quantity	Packaging specification
CESD923LC3V3B	SOD-923	Tape and reel	8000pcs / reel	EIA STD RS-481

## **Revision history**

Date	Revision	Changes
23-May-2012	1.0	Initial release

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## CESD923LC3V3B

### **CREATEK Microelectronics**

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