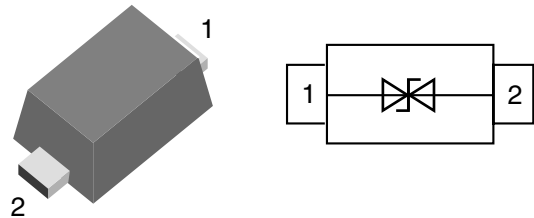


## ESD Protection Diode in SOD-923

### Features

- 158 Watts peak pulse power ( $t_p = 8/20\mu s$ )
- Tiny SOD923 package
- Bidirectional configurations
- Protects one I/O port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2  $\pm 30kV$  contact  $\pm 30kV$  air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 14.1A (8/20 $\mu s$ )



### 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

### Applications

- Computers and peripherals
- Communication systems
- Notebook
- Cellular handsets and accessories
- Portable electronics
- Audio and video equipment

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

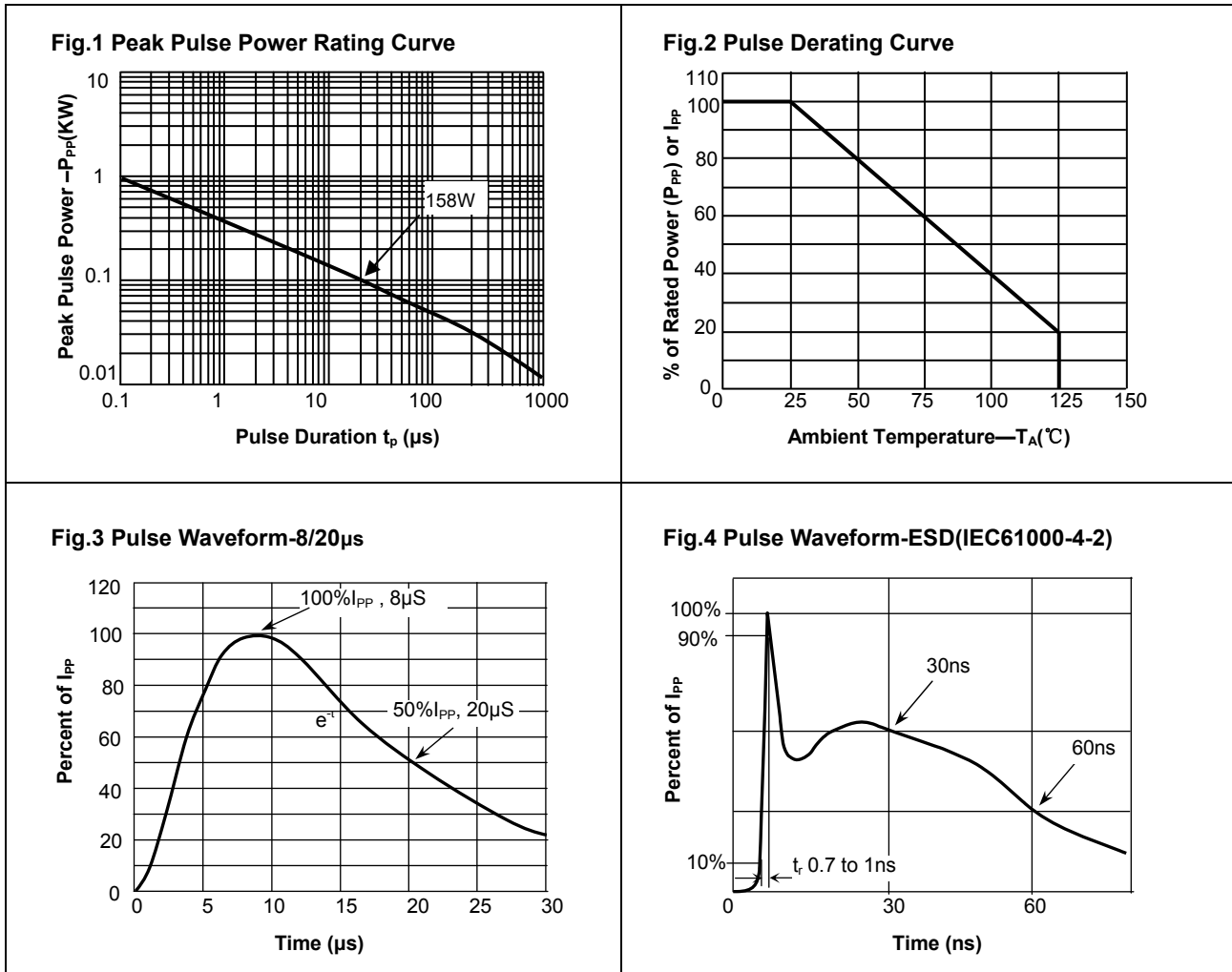
Parameter	Symbol	Value	Unit
ESD Air Discharge per IEC 61000-4-2	$V_{ESD}$	$\pm 30$	kV
ESD Contact Discharge per IEC 61000-4-2	$V_{ESD}$	$\pm 30$	kV
Peak pulse power 8/20 $\mu s$ waveform	$P_{PPM}$	158	W
Peak pulse current 8/20 $\mu s$ waveform	$I_{PPM}$	14.1	A
Operating Temperature	$T_J$	- 55 to + 125	°C
Storage Temperature	$T_{STG}$	- 55 to + 150	°C

### Electrical Characteristics

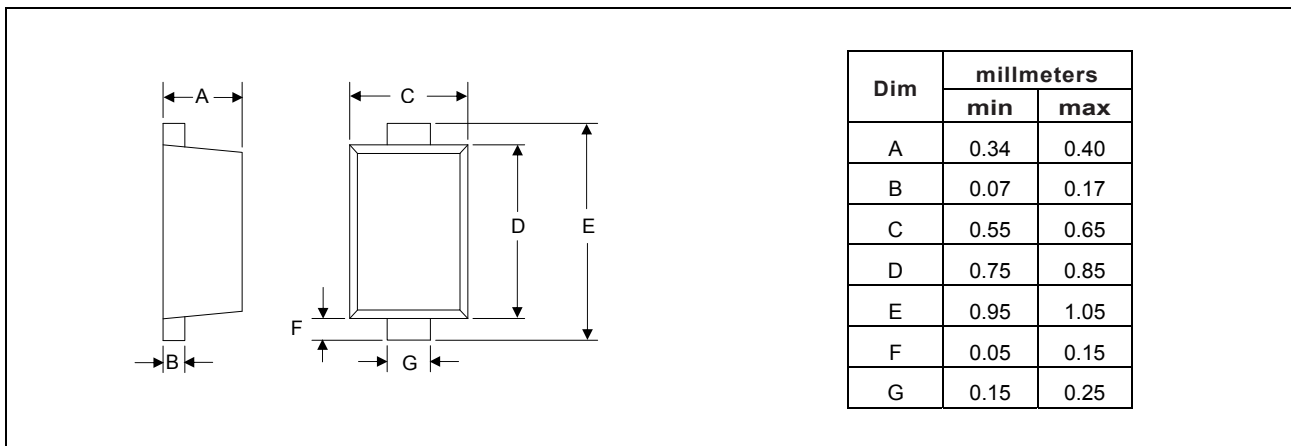
( $T_A = 25\text{ °C}$  unless otherwise specified)

Parameter	Test Conditions	Synbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage		$V_{RWM}$			3.3	V
Max. Reverse current	at $V_R = 3.3\text{ V}$	$I_R$			1	$\mu A$
Max. Clamping voltage	at $I_{PP} = 11.2\text{ A}$ , Acc. IEC 61000-4-5	$V_C$			14.1	V
Min. Reverse Breakdown Voltage	at $I_R = 1\text{ mA}$	$V_{BR}$	5.0	5.8		V
Capacitance	at $V_R = 0\text{ V}$ ; $f = 1\text{ MHz}$	$C_D$		15		pF

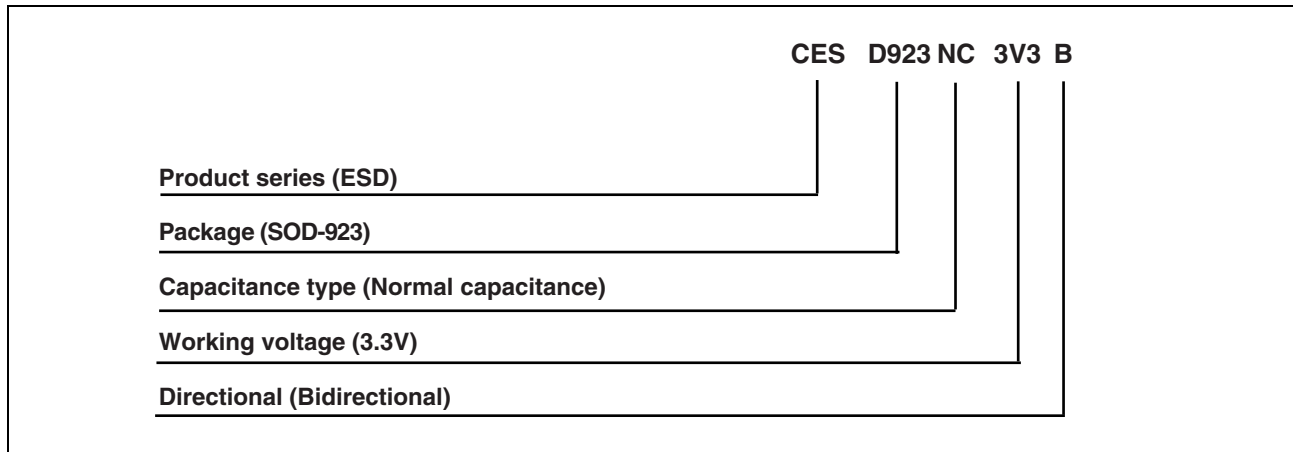
## Typical Characteristics ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



## Package Dimensions



## Part number system



## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CESD923NC3V3B	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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