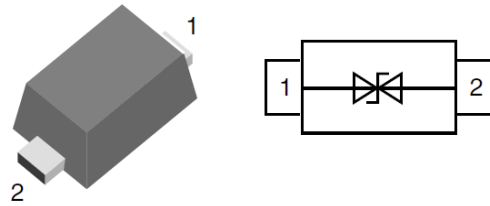


### Features

- ◆ 100 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) 8A (8/20  $\mu s$ )



### Applications

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

### 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

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
ESD Air Discharge per IEC 61000-4-2	$V_{ESD}$	30	kV
ESD Contact Discharge per IEC 61000-4-2	$V_{ESD}$	30	kV
Peak pulse power 8/20 $\mu s$ waveform	$P_{PPM}$	100	W
Peak pulse current 8/20 $\mu s$ waveform	$I_{PPM}$	8	A
Operating Temperature	$T_J$	- 55 to + 125	°C
Storage Temperature	$T_{STG}$	- 55 to + 150	°C

### Ordering/Mark information

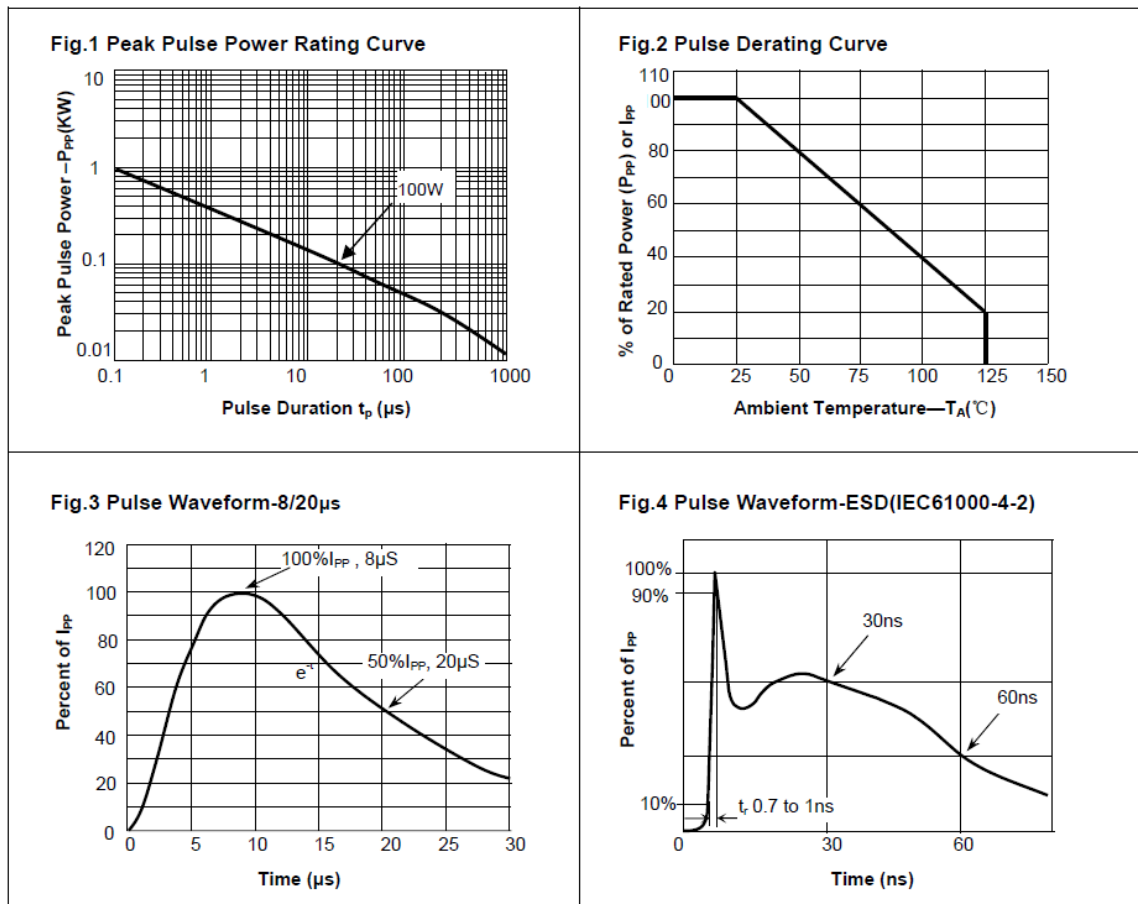
**CES**   **D323**   **NC**   **5V**   **BS**  
↓   ↘   ↗  
 Package : SOD-923   Directional : Bidirectional   Working voltage : 5V

Order code	Package	Marking	Base quantity	Packaging specification
CESD923NC5VBS	SOD-923	C	8000pcs / reel	EIA STD RS-481

## Electrical Characteristics ( $T_A = 25\text{ }^\circ\text{C}$ unless otherwise specified)

Parameter	Test Conditions	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage		$V_{RWM}$			5	V
Max. Reverse current	at $V_R = 5\text{ V}$	$I_R$			1	$\mu\text{A}$
Max. Clamping voltage	at $I_{PP} = 8\text{ A}$ , Acc. IEC 61000-4-5	$V_C$			13	V
Min. Reverse Breakdown Voltage	at $I_R = 1\text{ mA}$	$V_{BR}$	6.0	6.8		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

