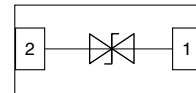
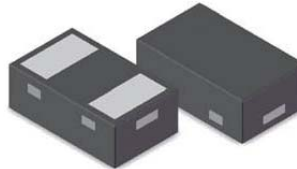


## ESD Protection Diode in SOD-882

### Features

- 150Watts peak pulse power ( $t_p = 8/20\mu s$ )
- SOD-882 package
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Medium capacitance ( $C_J = 15pF$  typ.)
- Protection one data/power line to:
  - IEC 61000-4-2  $\pm 30kV$  contact  $\pm 30kV$  air
  - IEC 61000-4-4 (EFT) 40A (5/50ns)
  - IEC 61000-4-5 (Lightning) 9.4A (8/20 $\mu s$ )



### Mechanical Data

- **Case:** SOD-882 (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

- Audio Line, Speaker, Headset, Microphone Protection
- Human Interface Devices (Keyboard, Touchpad, Buttons)

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

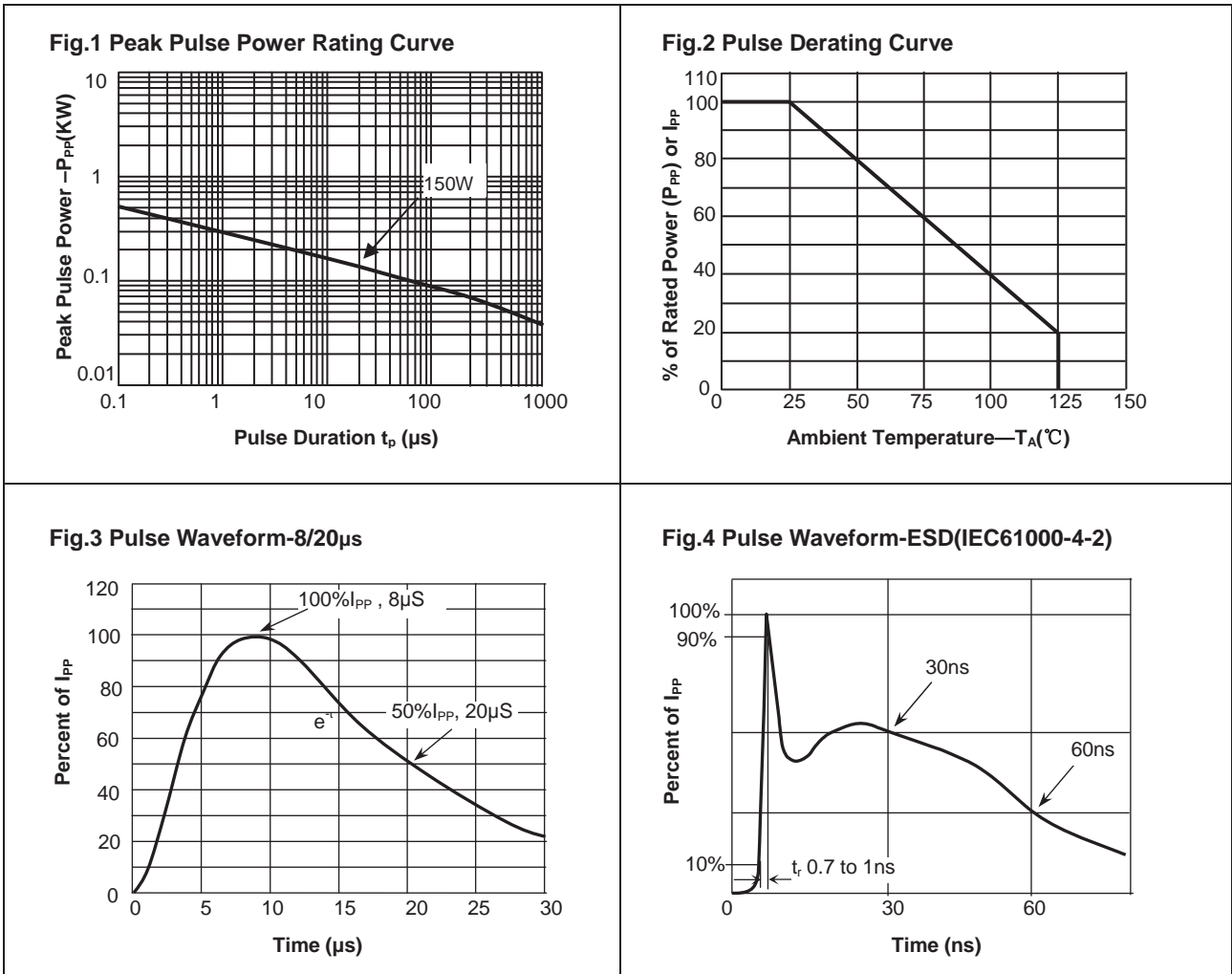
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_P = 8/20\mu s$ )	$P_{PP}$	150	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	30	kV
Peak Pulse Current ( $t_P = 8/20\mu s$ )	$I_{PP}$	9.4	A
Junction Temperature	$T_J$	-55 to +125	°C
Storage temperature	$T_{STG}$	-55 to +150	°C

### Electrical Characteristics

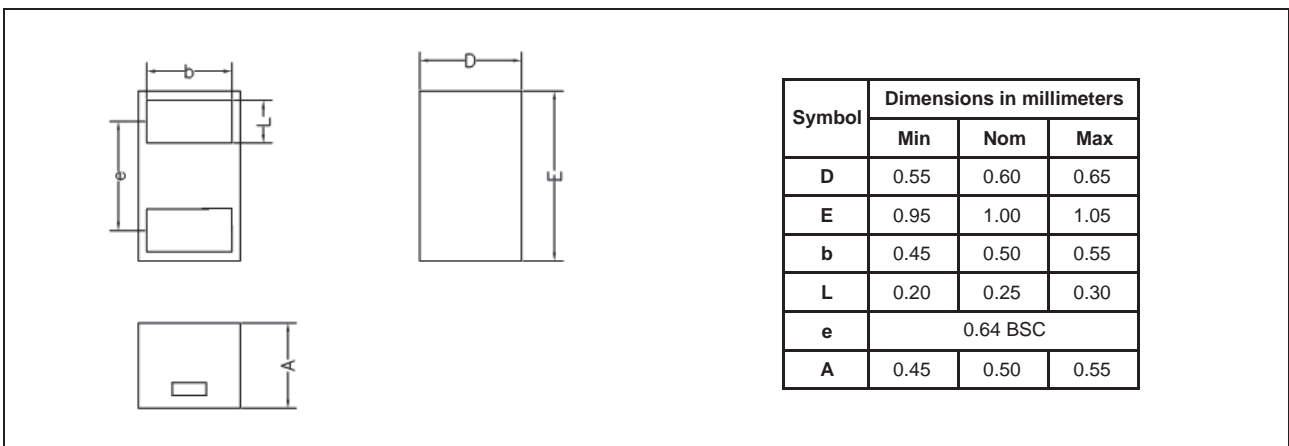
( $T_A = 25$  °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				3.3	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1mA$	5.6	6.8		V
Reverse Leakage Current	$I_R$	$V_R = 3.3V$			1.0	$\mu A$
Clamping Voltage (IEC 61000-4-5)	$V_C$	$I_{PP} = 5A$			11.6	V
		$I_{PP} = 9.4A$			18.6	
Trigger Voltage (IEC 61000-4-2)	$V_T$	$V_{ESD} = 8kV$		90		V
Clamping Voltage (IEC 61000-4-2)	$V_C$	$V_{ESD} = 8kV$		15		V
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz$		15		pF

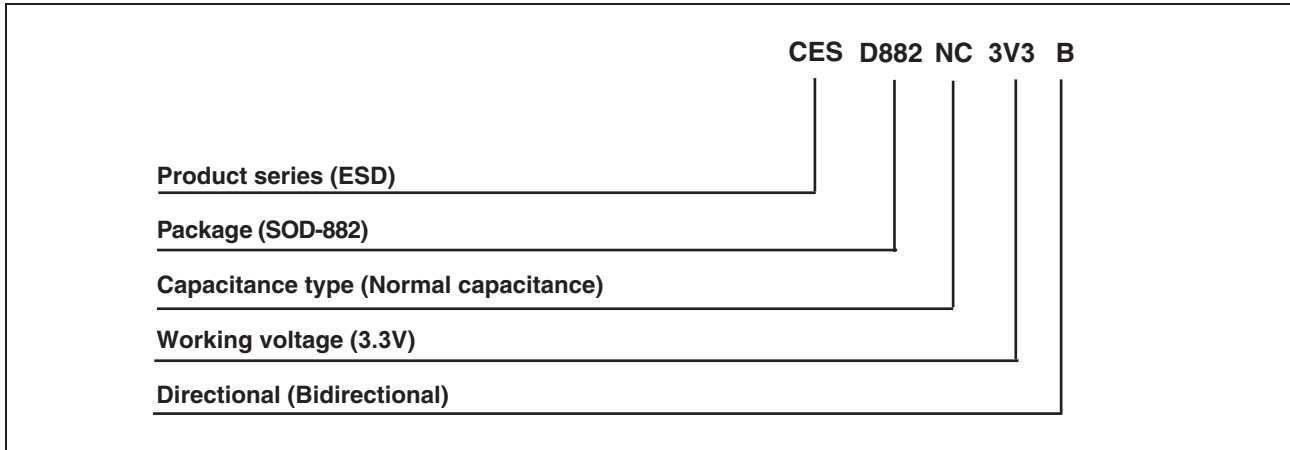
**Typical Characteristics** ( $T_{amb} = 25\text{ }^{\circ}\text{C}$  unless otherwise specified)



**Package Dimensions**



## Part number system



## Marking



## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CESD882NC3V3B	SOD-882	Tape and reel	10000pcs / reel	EIA STD RS-481

## Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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