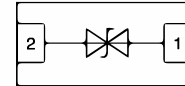
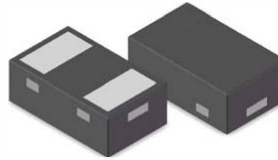




## ESD Protection Diode in SOD-882

### Features

- SOD-882 package
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Medium capacitance (C<sub>J</sub>=10pF typ.)
- Protection one data/power line to:
  - IEC 61000-4-2 ±30kV contact ±30kV air
  - IEC 61000-4-4 (EFT) 40A (5/50ns)
  - IEC 61000-4-5 (Lightning) 6A (8/20μs)



### Mechanical Data

- **Case:** SOD-882 (plastic package).  
Lead free; RoHS compliant; Halogen free
- **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 <sub>P</sub> =8/20μS)	P <sub>PP</sub>	90	W
ESD contact/air discharge (IEC-61000-4-2)	V <sub>ESD</sub>	30/30	kV
Peak Pulse Current ( t <sub>P</sub> = 8/20μS )	I <sub>PP</sub>	6	A
Junction Temperature	T <sub>J</sub>	-55 to +125	°C
Storage temperature	T <sub>STG</sub>	-55 to +150	°C

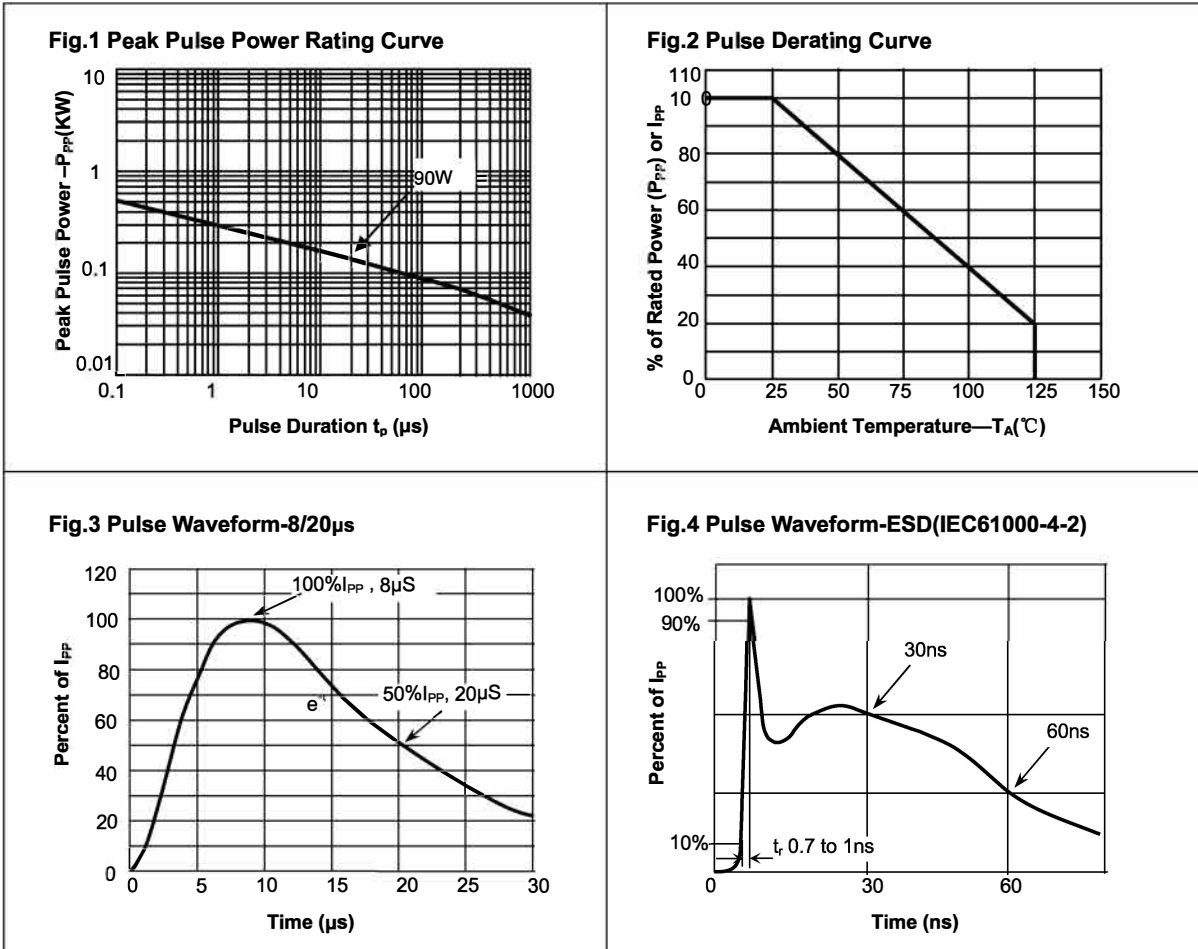
### Electrical Characteristics

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

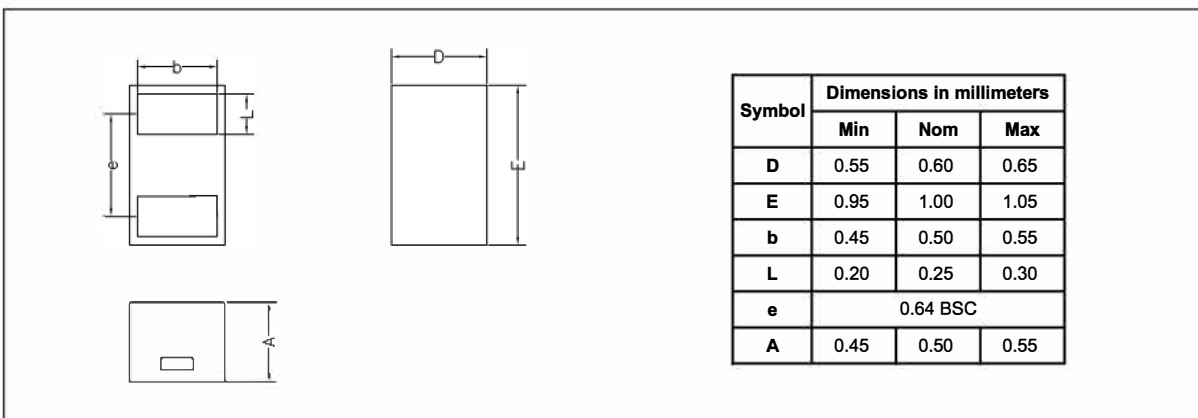
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V <sub>RWM</sub>				5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> =1mA	5.6	6.8		V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =5V			1.0	uA
Clamping Voltage (IEC 61000-4-5)	V <sub>C</sub>	I <sub>PP</sub> =6A		7.5	10	V
Clamping Voltage (IEC 61000-4-2)	V <sub>C</sub>	V <sub>ESD</sub> =8kV		12		V
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =0V, f=1MHz		10	15	pF



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

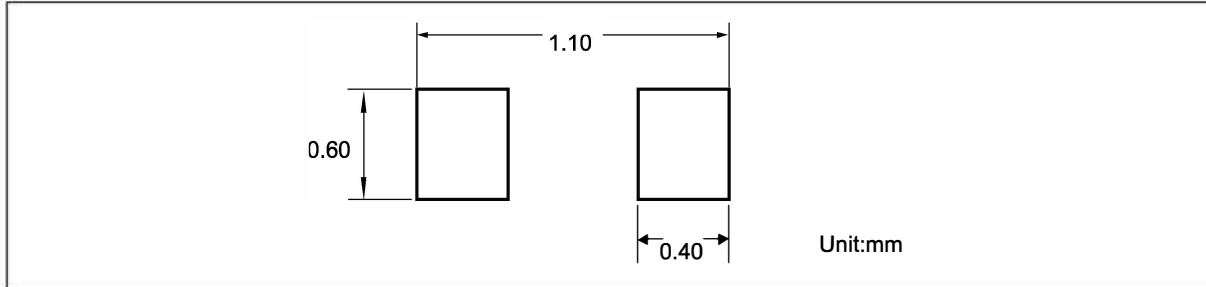


## Package Dimensions

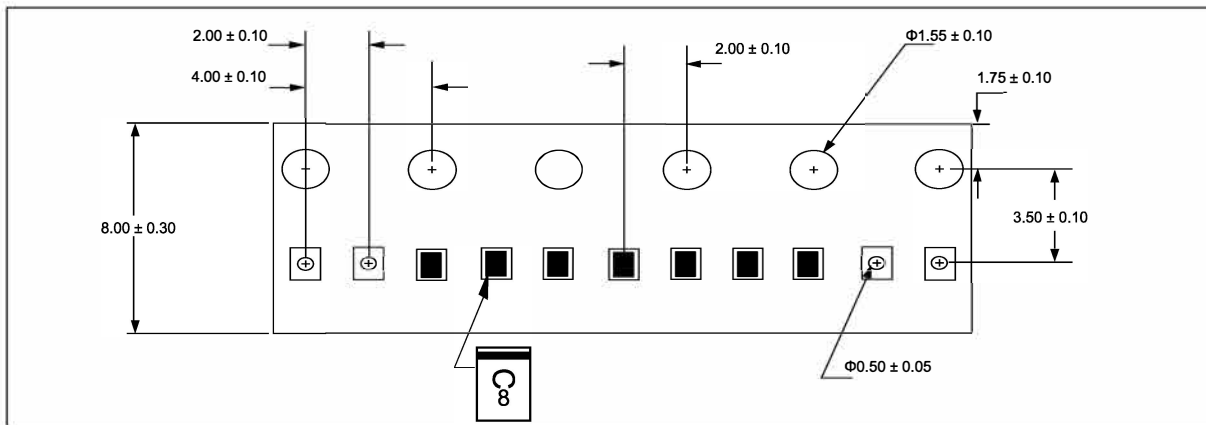




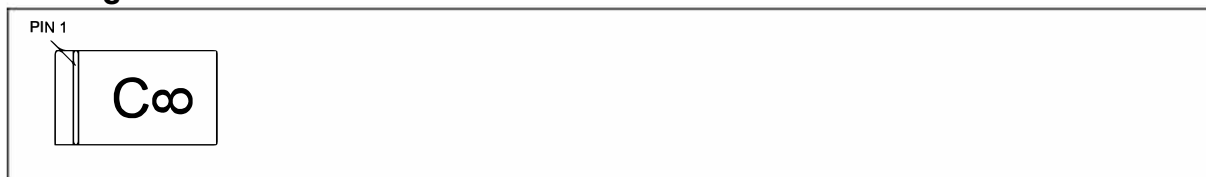
## Pad Dimensions



## Tape and Reel Specification



## Marking



## Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CESD882NC5VB	SOD-882	Tape and reel	10000pcs / reel	EIA STD RS-481

## Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release
28-July-2018	2.0	Update