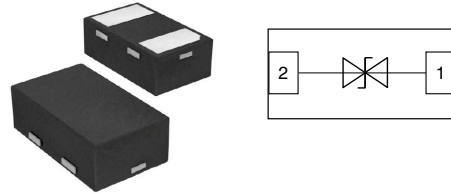


ESD Protection Diode in SOD-882

Features

- SOD-882 package
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Medium capacitance (C_J=15pF 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) 7.5A (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

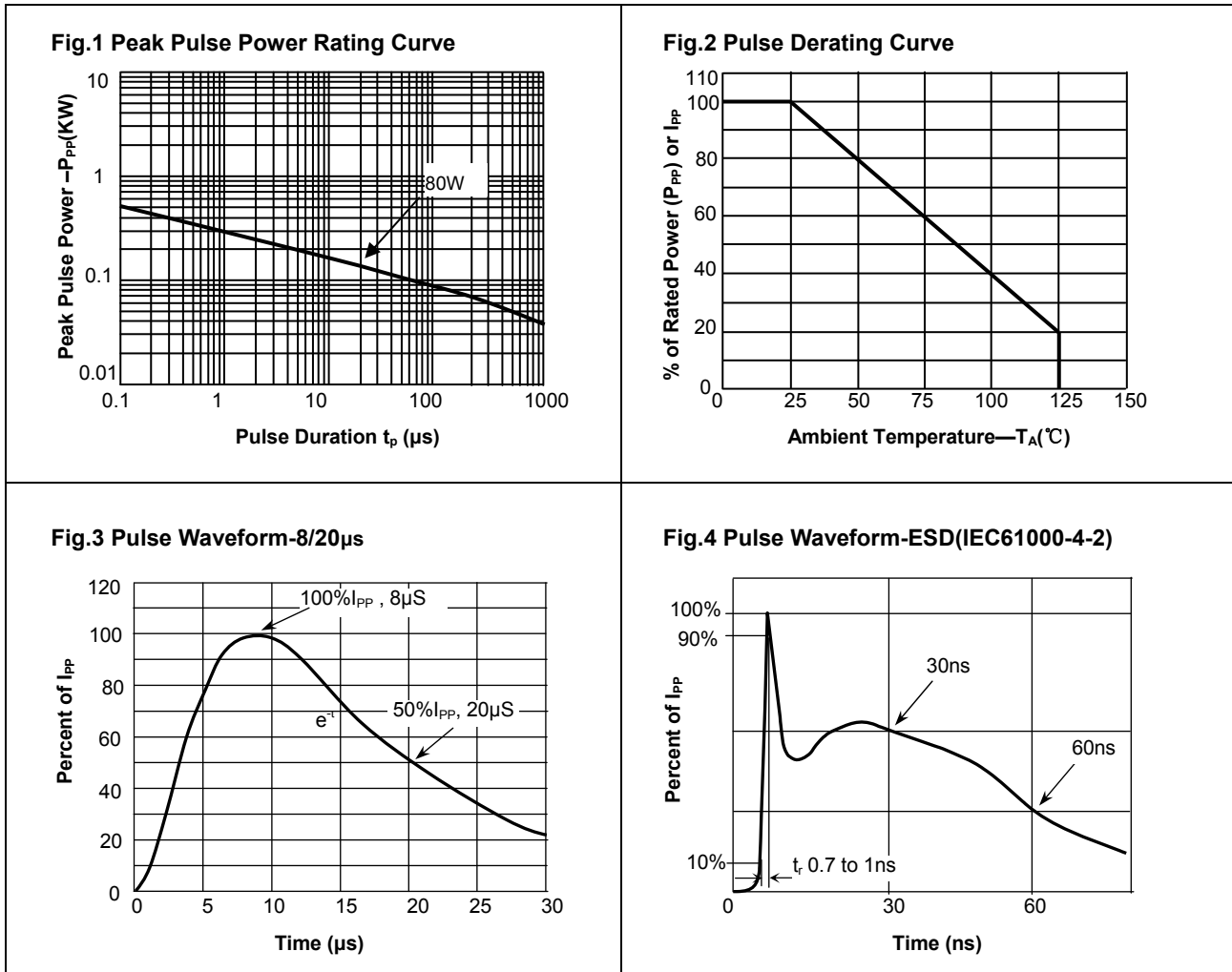
Parameter	Symbol	Value	Unit
Peak Pulse Power (T _P =8/20μs)	P _{PP}	80	W
ESD contact/air discharge (IEC-61000-4-2)	V _{ESD}	30/30	kV
Peak Pulse Current (T _P = 8/20μs)	I _{PP}	7.5	A
Junction Temperature	T _J	-55 to +125	°C
Storage temperature	T _{STG}	-55 to +150	°C

Electrical Characteristics

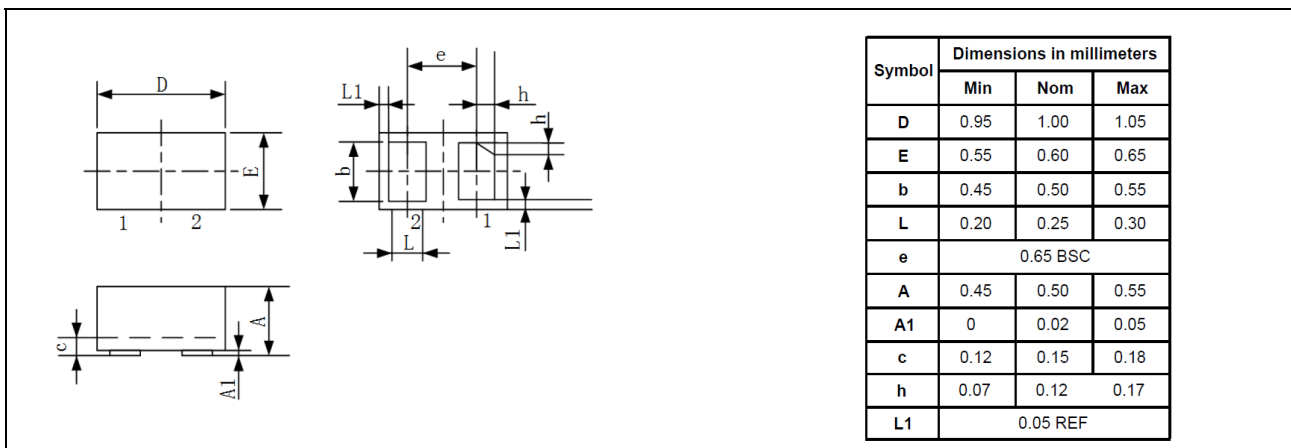
(T_A = 25 °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V _{RWM}				5	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	5.2			V
Reverse Leakage Current	I _R	V _R =5V			1.0	uA
Clamping Voltage (IEC 61000-4-5)	V _C	I _{PP} =7.5A		10	13	V
Clamping Voltage (IEC 61000-4-2)	V _C	V _{ESD} =8kV		10		V
Junction Capacitance	C _J	V _R =0V, f=1MHz		15		pF

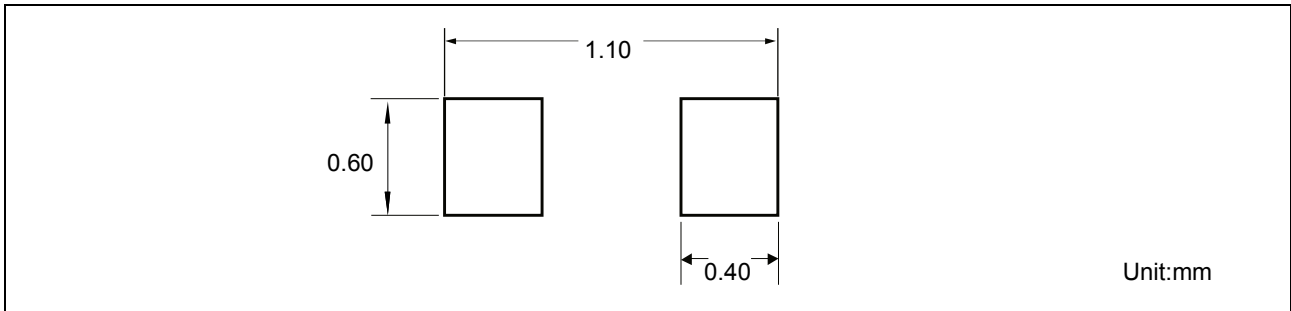
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



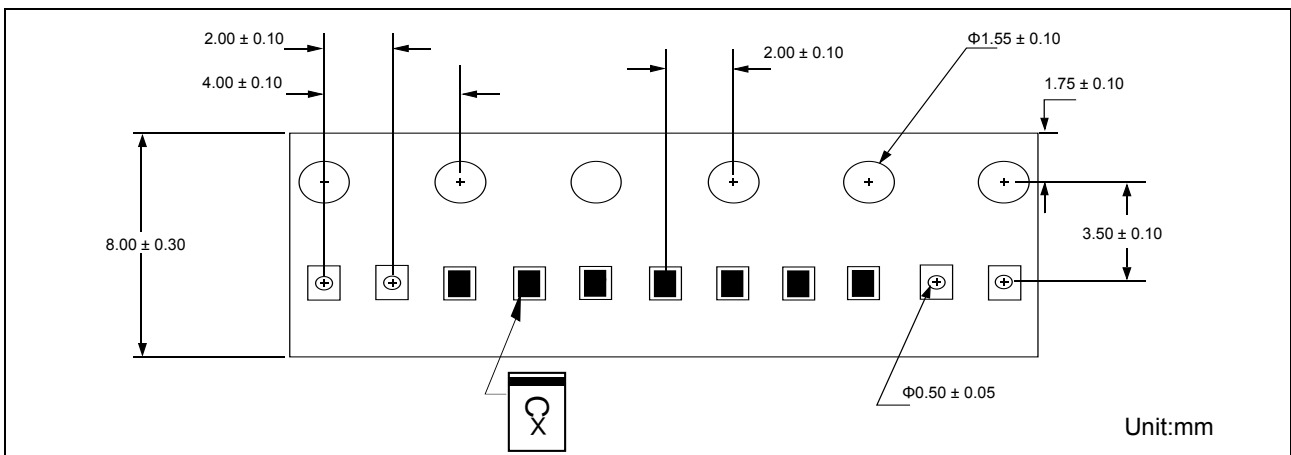
Package Dimensions



Pad Dimensions



Tape and Reel Specification



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
TESD882NC5VB	SOD-882	Tape and reel	10000pcs / reel	EIA STD RS-481