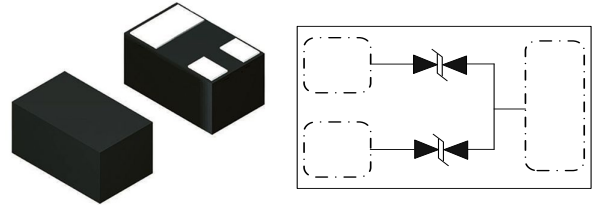


ESD Protection Diode in SOT883

Features

- 60Watts peak pulse power ($t_p = 8/20\mu s$)
- SOT-883 package
- Bidirectional configurations
- Low clamping voltage
- Low leakage current
- Low capacitance ($C_j = 6pF$ typ.)
- Protection one data/power line to:
 - IEC 61000-4-2 $\pm 20kV$ contact $\pm 25kV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 5A (8/20 μs)



Mechanical Data

- **Case:** SOT-883 (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

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

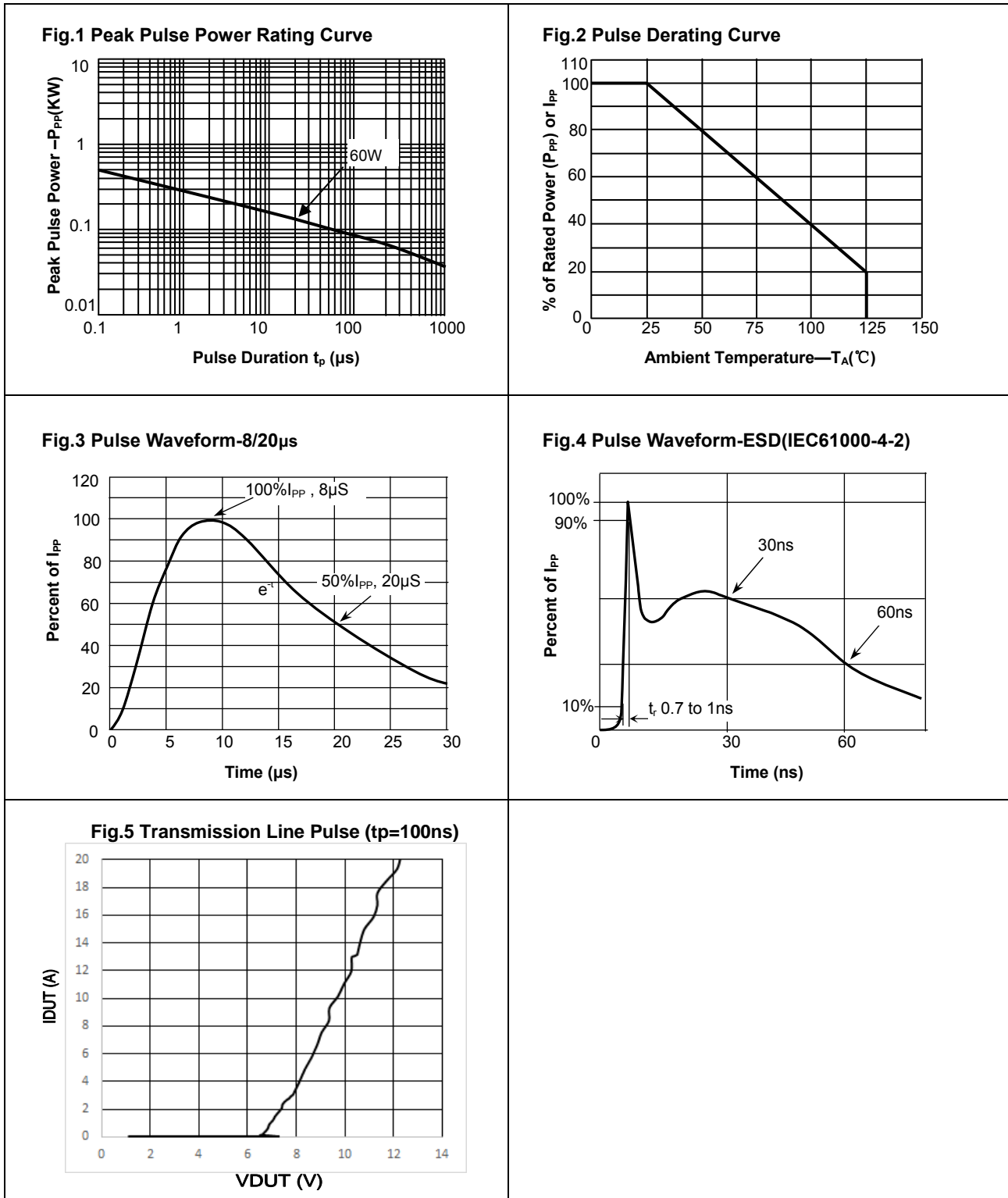
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu S$)	P_{PP}	60	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	20/25	kV
Peak Pulse Current ($t_P = 8/20\mu S$)	I_{PP}	5	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

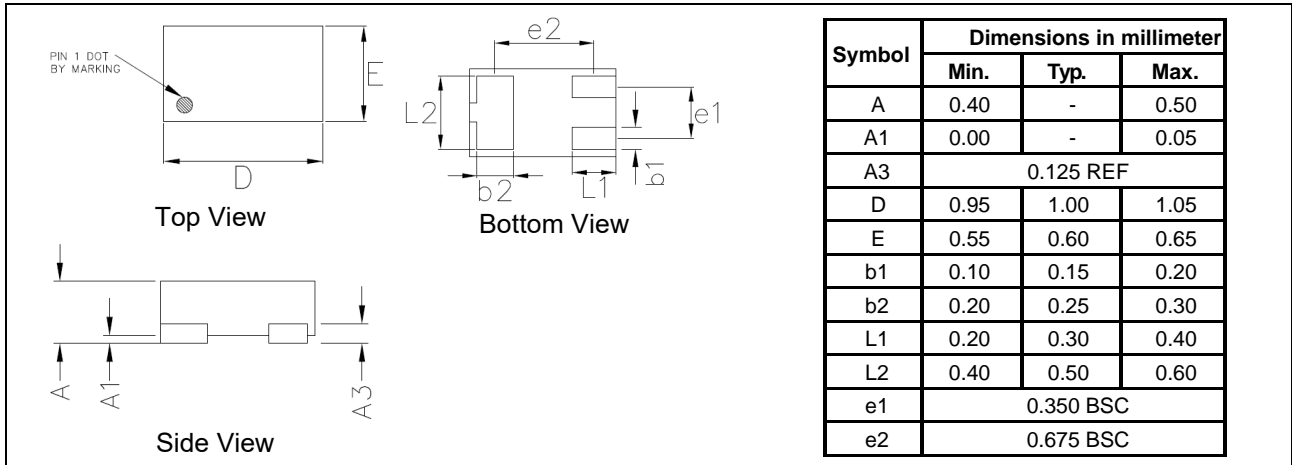
($T_A = 25$ °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	5.8			V
Reverse Leakage Current	I_R	$V_R=5V$		0.01	1	μA
Clamping Voltage(SURGE)	V_C	$I_{PP}=5A, T_P=8/20\mu S$			10	V
Clamping Voltage(ESD)	V_C	$V_{ESD} = +6kV$		8.5		V
Clamping Voltage(TLP)	V_C	$I_{PP}=8A, T_P=100ns$		9		V
Clamping Voltage(TLP)	V_C	$I_{PP}=16A, T_P=100ns$		11		V
Dynamic Resistance	R_{dyn}	$I_{TLP}=0A\sim 20A$		0.295		Ω
Junction Capacitance	C_J	$V_R=0V, f=1MHz, pin 1,2 to 3$		6		pF

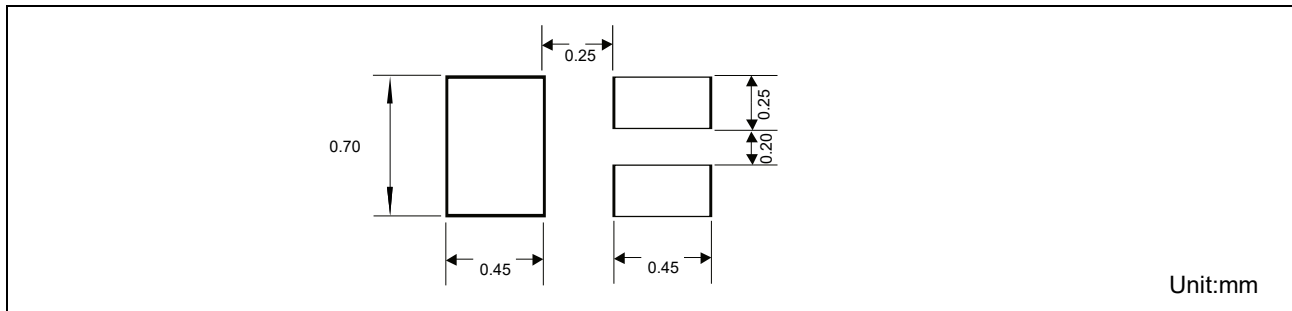
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



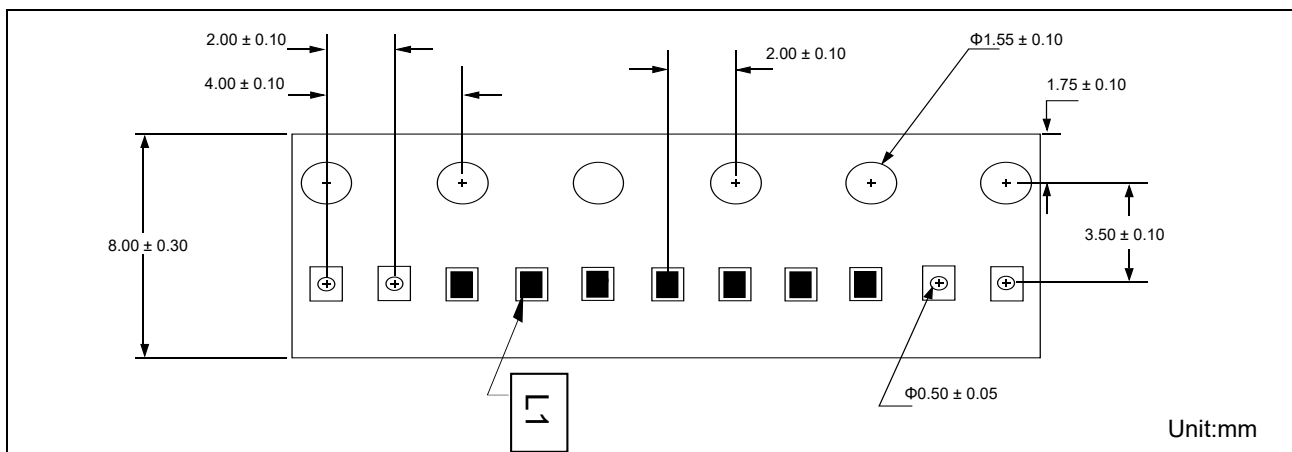
Package Dimensions



Pad Dimensions



Tape and Reel Specification



Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
CEST883NC5VB	L1	SOT-883	Tape and reel	10000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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