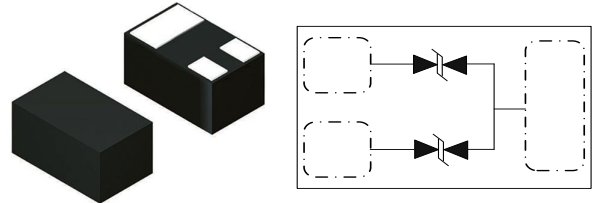


## ESD Protection Diode in SOT883

### Features

- 60Watts peak pulse power ( $T_P = 8/20\mu s$ )
- SOT-883 package
- Bidirectional configurations
- Low clamping voltage
- Low leakage current
- Low capacitance ( $C_J = 15pF$  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 $\mu s$ )



### 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

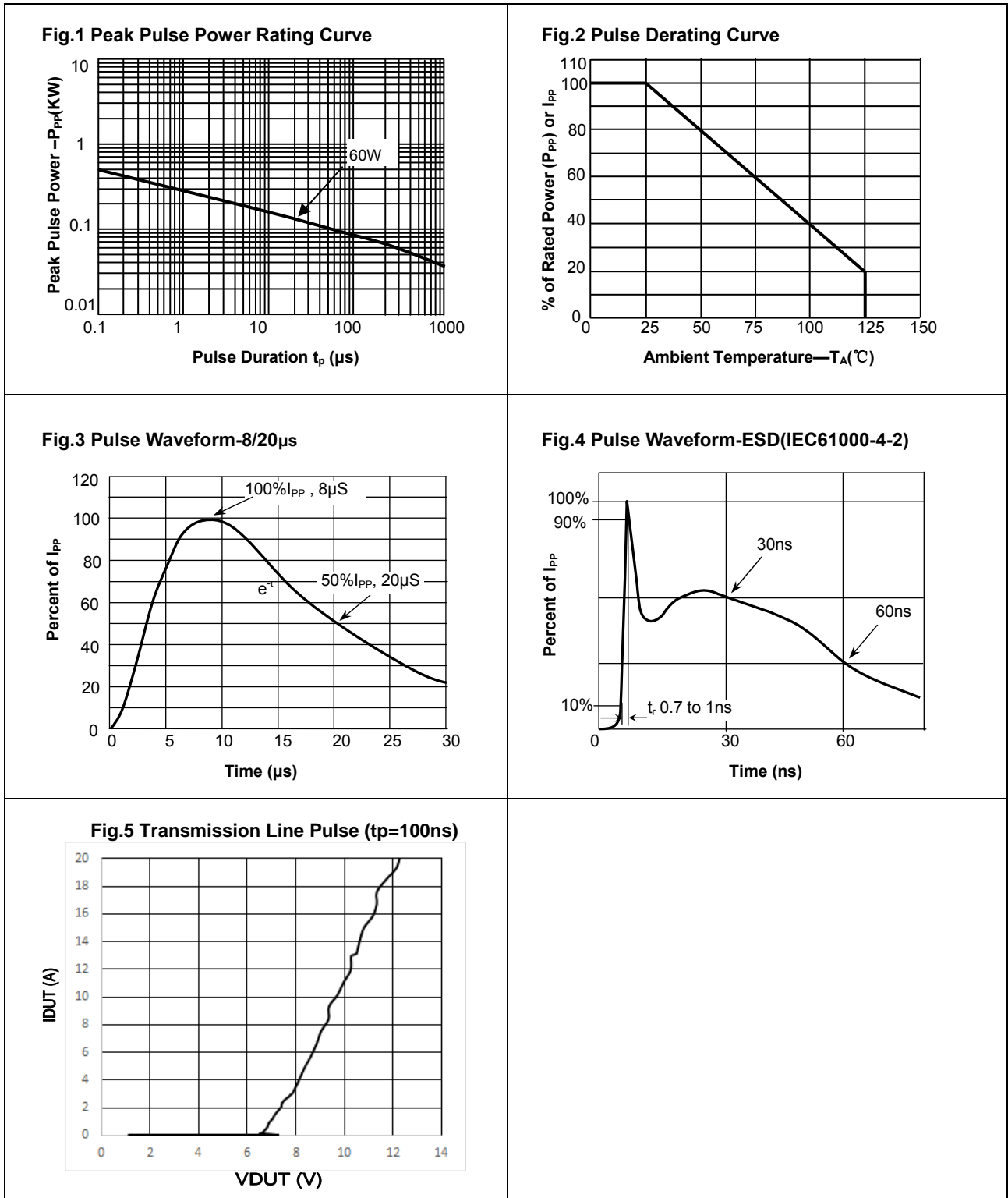
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_P = 8/20\mu s$ )	$P_{PP}$	60	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	20/25	kV
Peak Pulse Current ( $T_P = 8/20\mu s$ )	$I_{PP}$	5	A
Junction Temperature	$T_J$	-55 to +125	°C
Storage temperature	$T_{STG}$	-55 to +150	°C

### Electrical Characteristics

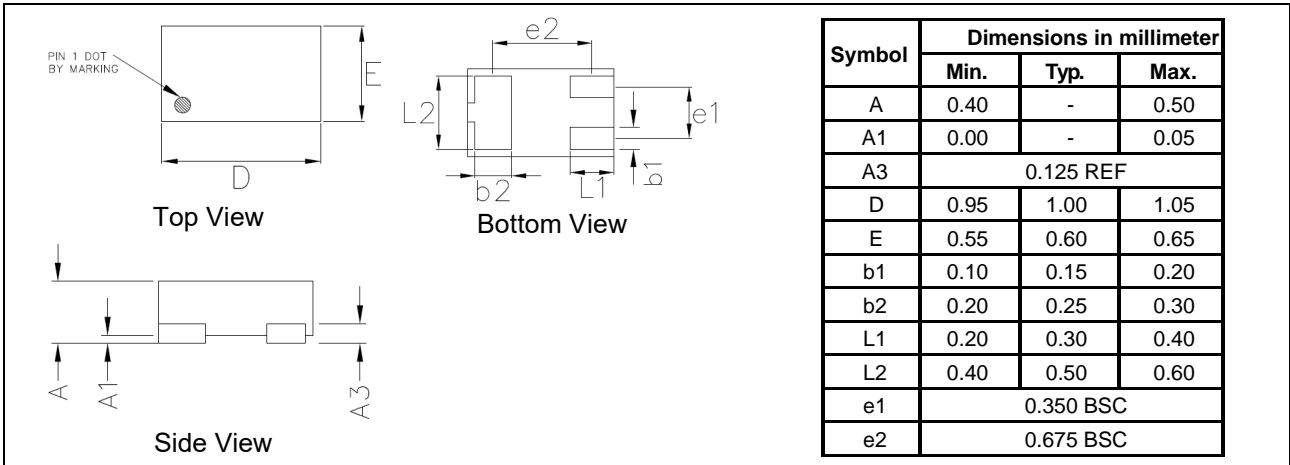
( $T_A = 25\text{ °C}$  unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1mA$	5.6			V
Reverse Leakage Current	$I_R$	$V_R = 5V$		0.01	1	$\mu A$
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	$R_{dyn}$			0.295		$\Omega$
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz, \text{pin } 1,2 \text{ to } 3$		15		pF

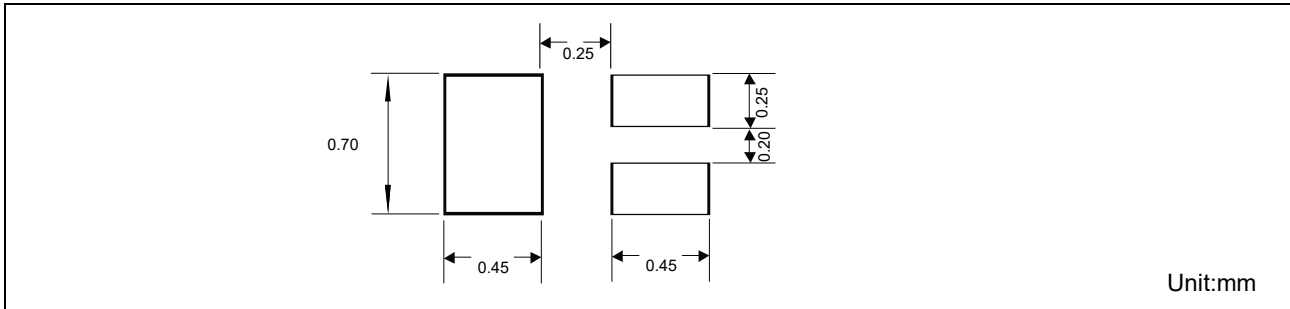
## Typical Characteristics ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



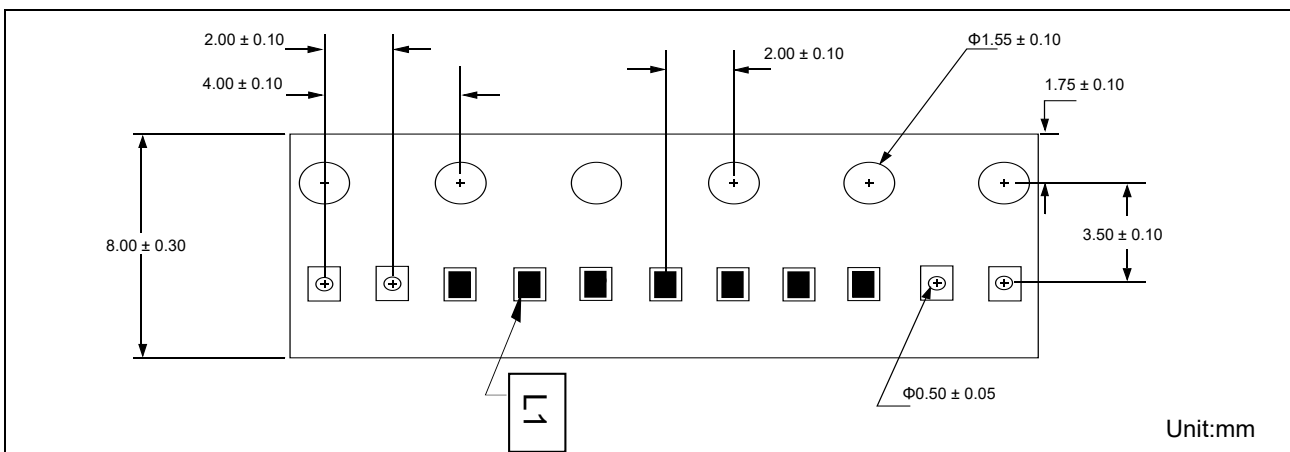
## Package Dimensions



## Pad Dimensions



## Tape and Reel Specification



## Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
TEST883NC5VB	L1	SOT-883	Tape and reel	10000pcs / reel	EIA STD RS-481