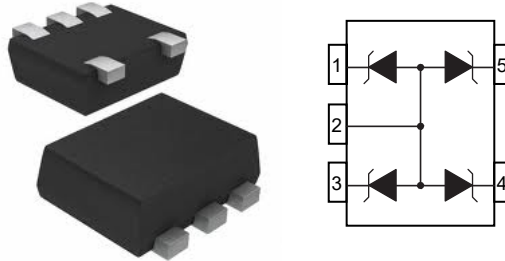


ESD TVS Array in SOT553

Features

- 30Watts peak pulse power ($t_p = 8/20\mu s$)
- SOT553 Package
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Normal capacitance (16.5pF typical I/O to GND)
- Protection to:
 - IEC 61000-4-2 $\pm 25KV$ contact $\pm 25KV$ air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 2A (8/20 μs)



Mechanical Data

- **Case:** SOT553 (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

- Computers and peripherals
- Communication systems
- Notebook
- Cellular handsets and accessories
- Portable electronics
- Audio and video equipment

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}	30	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	25/25	kV
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	2.0	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

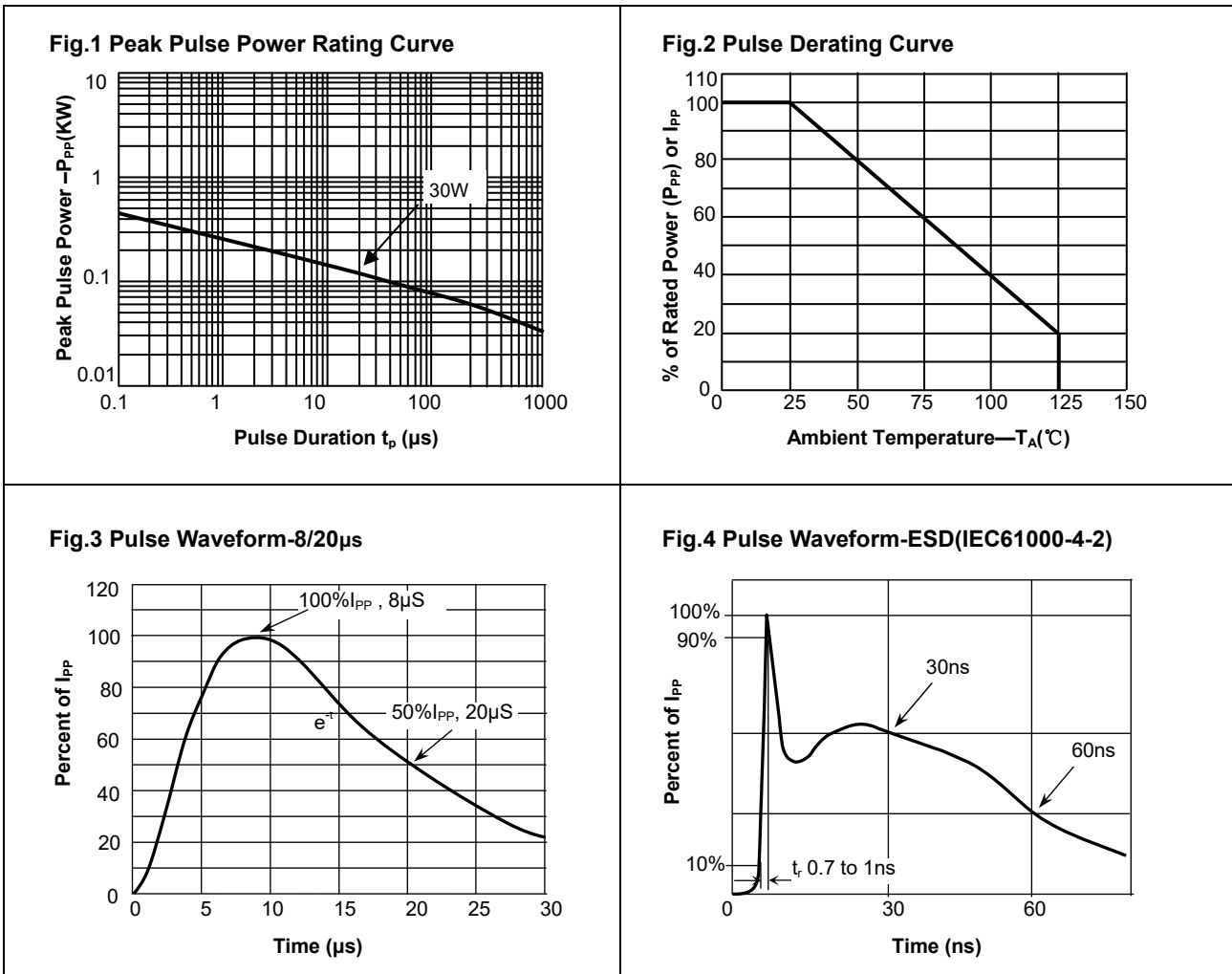
Electrical Characteristics

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

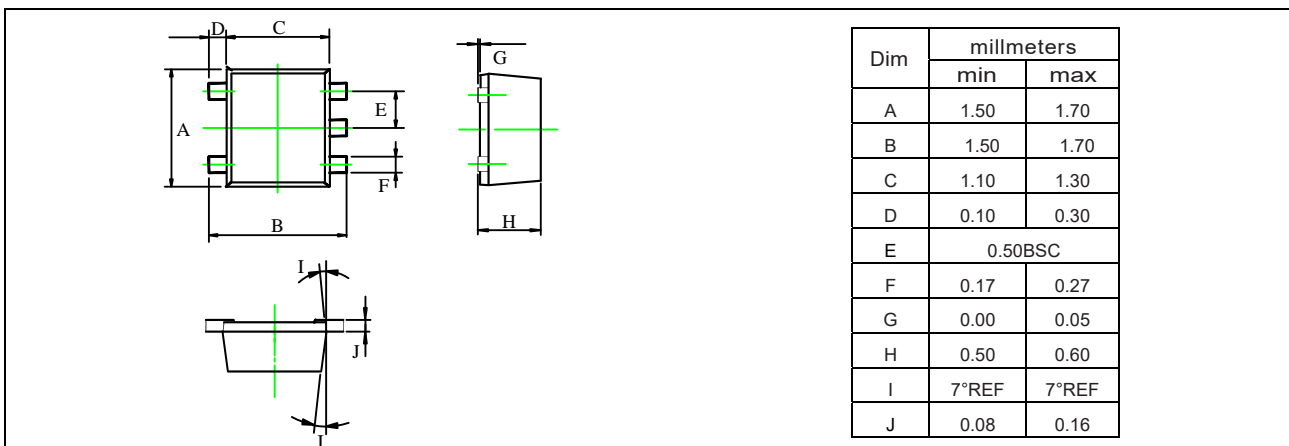
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6			V
Reverse Leakage Current	I_R	$V_R=5V$		0.01	1	μA
Clamping Voltage(SURGE)	V_C	$I_{PP}=2A, T_p=8/20\mu s$			11	V
Clamping Voltage(TLP)	V_T	$I_{PP}=16A, T_p=0.2/100ns$		15.5		V
Dynamic Resistance(TLP)	R_{DYN}			0.4		Ω
Junction Capacitance	C_J	$V_R=0V, f=1MHz^{(1)}$		16.5		pF

Note1: Pin 1, 3, 4, 5 to Pin 2

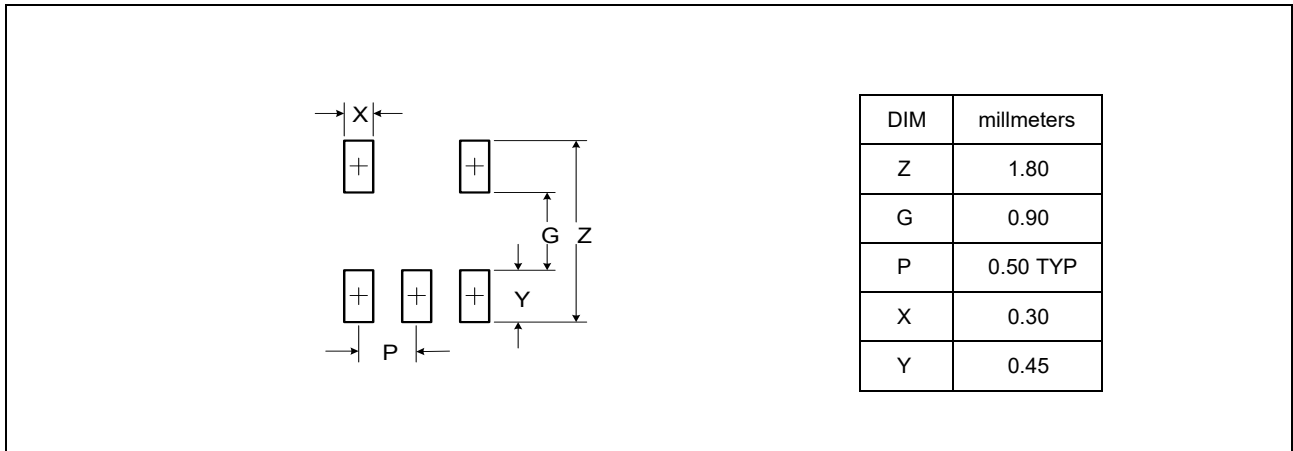
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Part number system



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CEST553NC5VU	SOT-553	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2020	1.0	Initial release

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