



ESD TVS Array in SOT-23

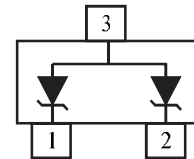
CEST23NC5VU

Features

- 300 Watts peak pulse power ($t_P = 8/20\mu s$)
- SOT-23 package
- Protects one bidirectional or two unidirectional lines
- Fast response time, typically < 1 ns
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2 ± 30 kV (Air) ESD protection
- IEC 61000-4-2 ± 30 kV (Contact) ESD protection
- IEC 61000-4-4 40A (5/50ns) EFT protection
- RoHS compliant

Mechanical Data

- **Case:** SOT-23 (plastic package).
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals



Applications

- Cellular Handsets and Accessories
- Portable Electronics
- Control & Monitoring Systems
- Servers, Notebooks, and Desktop Pcs
- Set-Top Box
- Communication Systems

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}	300	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	30/30	kV
Peak Pulse Current ($t_P = 8/20\mu S$)	I_{PP}	16.7	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

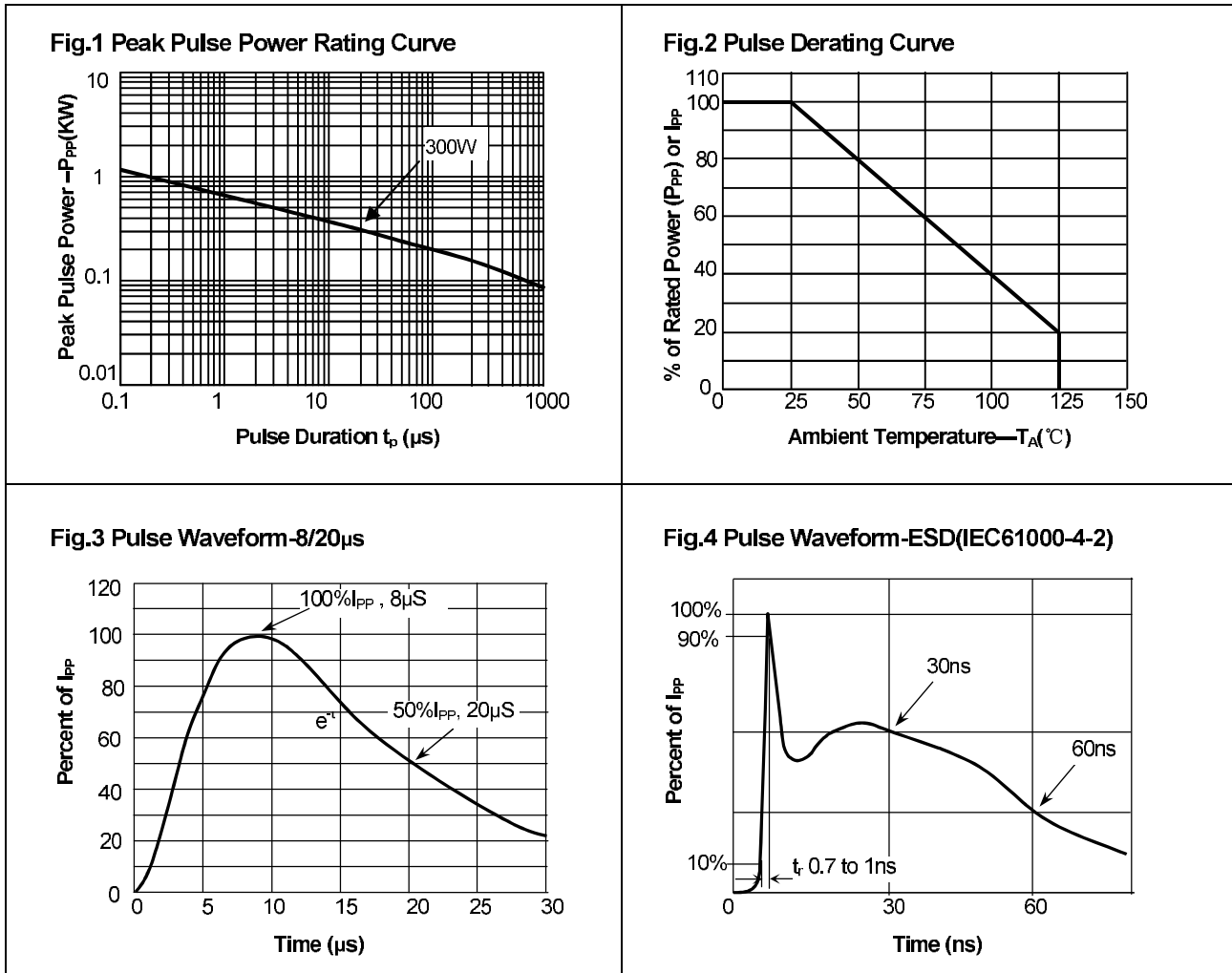
Electrical Characteristics

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

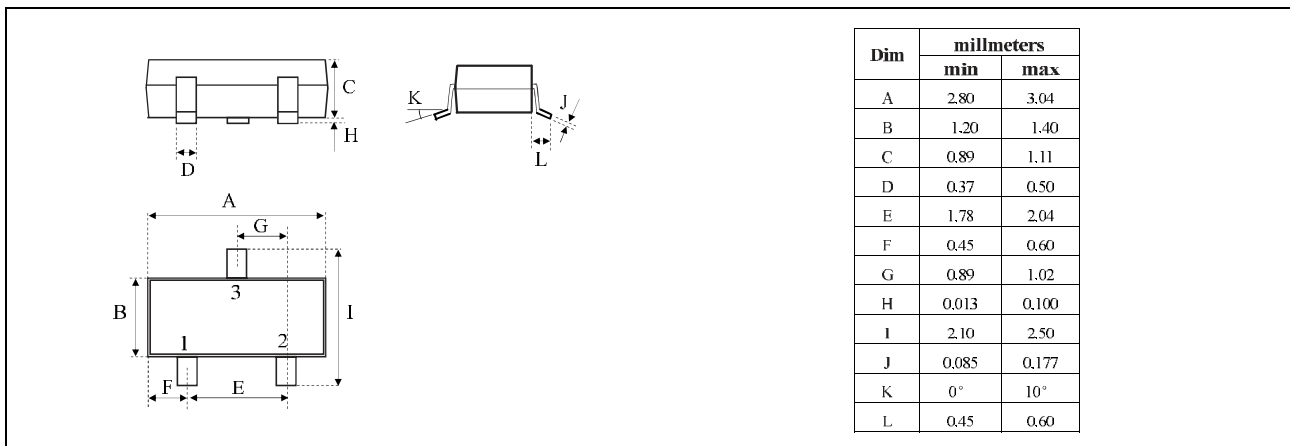
Parameter	Symbols	Conditions	Min	Typ	Max	Units
Reverse stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6		7.4	V
Reverse Leakage Current	I_R	$V_{RWM}=5V, T=25^\circ C$			1	μA
Clamping Voltage	V_C	$I_{PP}=1A, T_P=8/20\mu S$			8.2	V
Clamping Voltage	V_C	$I_{PP}=16.7A, T_P=8/20\mu S$			15.8	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz$		60		pF



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

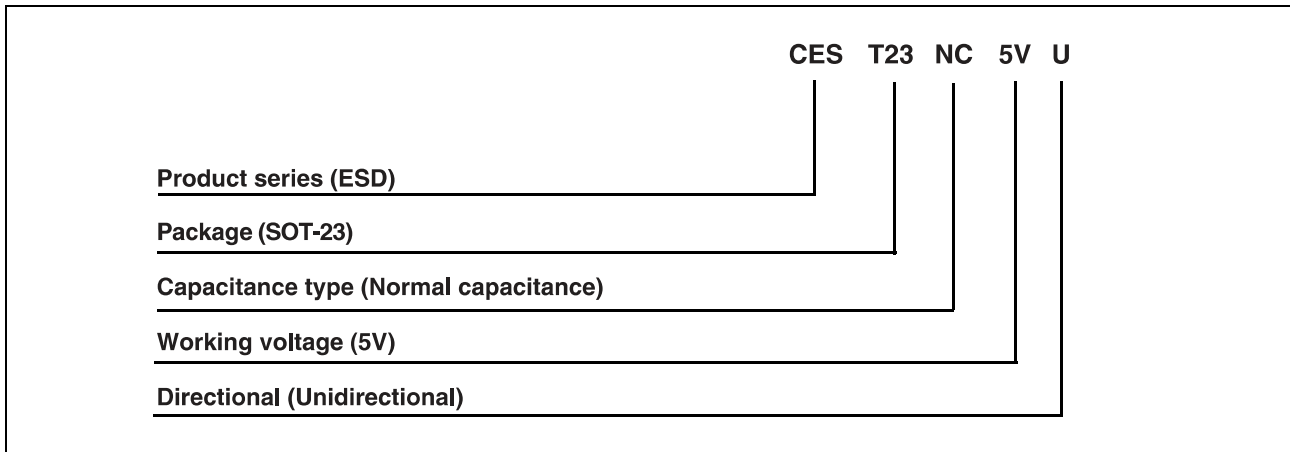


Package Dimensions





Part number system



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CEST23NC5VU	SOT-23	Tape and reel	3000pcs / reel	EIA STD RS-481

Reision history

Date	Revision	Changes
23-May-2012	1.0	Initial release