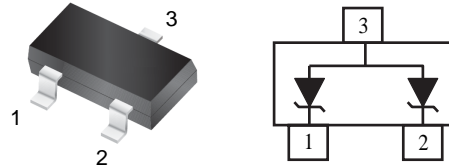


ESD TVS Array in SOT-23

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 $< 1\text{ ns}$
- Excellent clamping voltage
- Low leakage current
- IEC 61000-4-2 $\pm 30\text{kV}$ (Air) ESD protection
- IEC 61000-4-2 $\pm 30\text{kV}$ (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

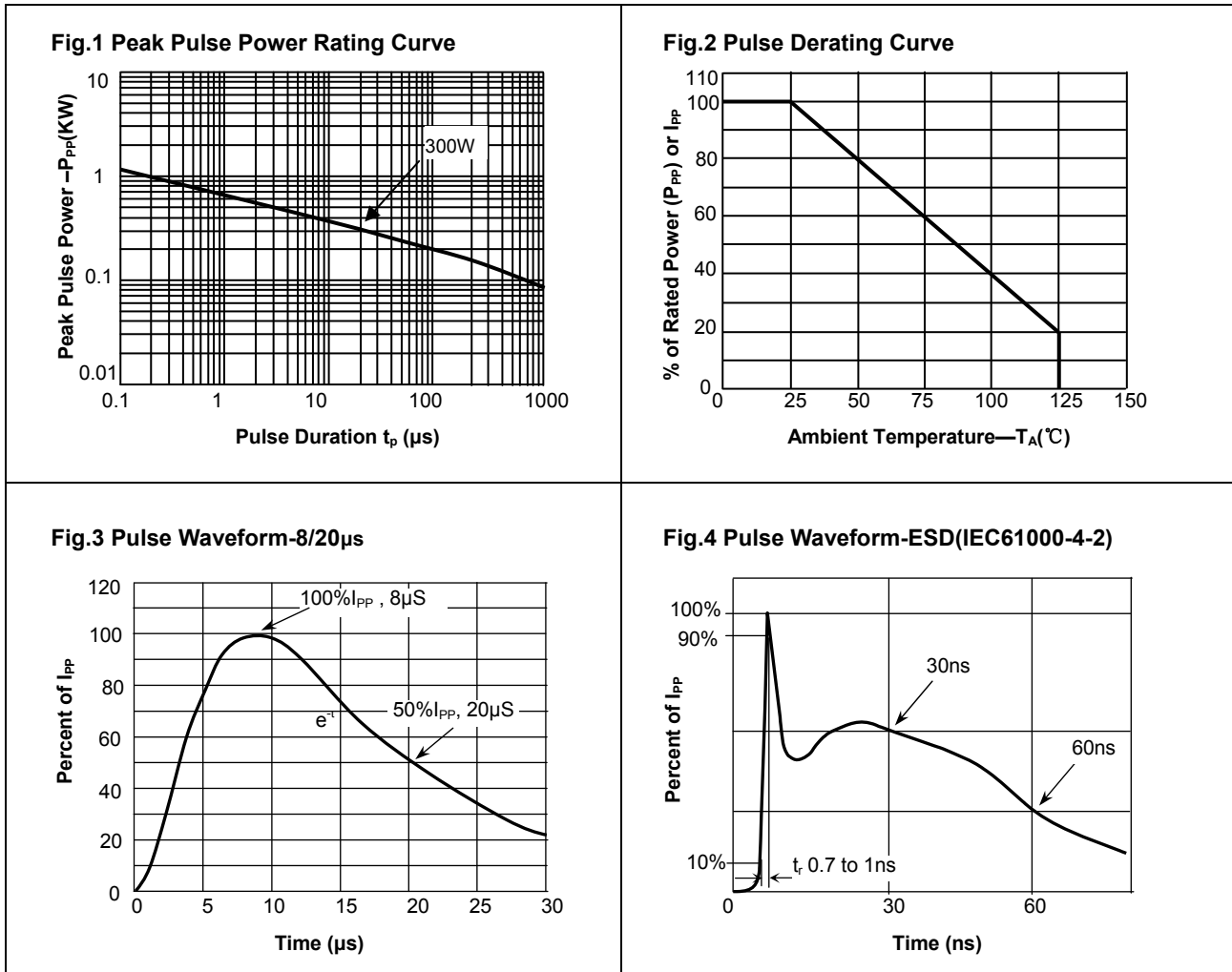
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu S$)	P_{PP}	300	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	30/30	kV
Peak Pulse Current ($t_P = 8/20\mu S$)	I_{PP}	10	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

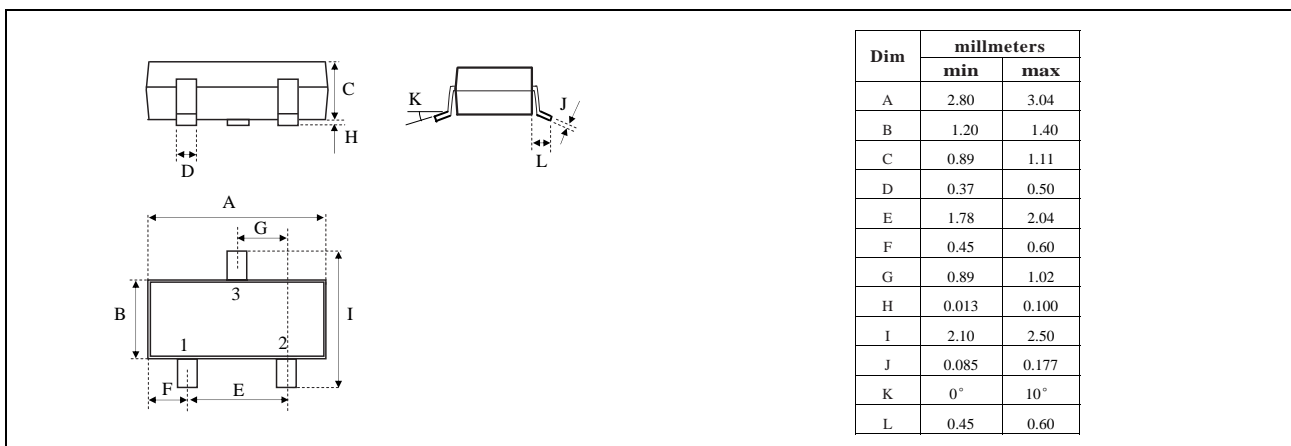
($T_A = 25\text{ °C}$ unless otherwise specified)

Parameter	Symbols	Conditions	Min	Typ	Max	Units
Reverse stand-off Voltage	V_{RWM}				12	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	13.3		16.5	V
Reverse Leakage Current	I_R	$V_R=12\text{V}$			1	μA
Clamping Voltage	V_C	$I_{PP}=1\text{A}, T_P=8/20\mu S$			16	V
Clamping Voltage	V_C	$I_{PP}=10\text{A}, T_P=8/20\mu S$			30	V
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$		60		pF

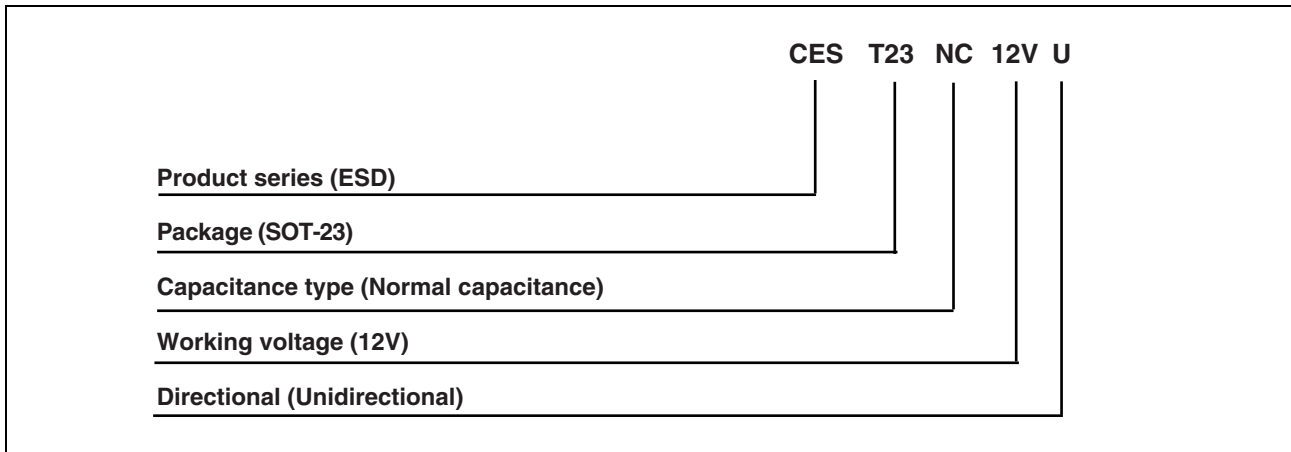
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



Package Dimensions



Part number system



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
CEST23NC12VU	SOT-23	Tape and reel	3000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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