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CEST23NC12VU

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ESD TVS Array in SOT-23

Features

- 300 Watts peak pulse power (t_P = 8/20µs)
- 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 ±30kV (Air) ESD protection
- IEC 61000-4-2 ±30kV (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

Absolute Maximum Ratings

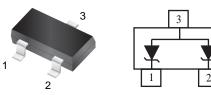
Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power (T _P =8/20µS)	P _{PP}	300	W
ESD contact/air discharge (IEC-61000-4-2)	V _{ESD}	30/30	kV
Peak Pulse Current (t⊵ = 8/20µS)	I _{PP}	10	А
Junction Temperature	TJ	-55 to +125	°C
Storage temperature	T _{STG}	-55 to +150	°C

Electrical Characteristics

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

Parameter	Symbols	Conditions	Min	Тур	Max	Units
Reverse stand-off Voltage	V _{RWM}				12	V
Reverse Breakdown Voltage	V_{BR}	I _T =1mA	13.3		16.5	V
Reverse Leakage Current	I _R	V _R =12V			1	μA
Clamping Voltage	Vc	I _{PP} =1A,T _P =8/20μS			16	V
Clamping Voltage	Vc	I _{PP} =10A,T _P =8/20μS			30	V
Junction Capacitance	CJ	V _R =0V,f=1MHz		60		pF



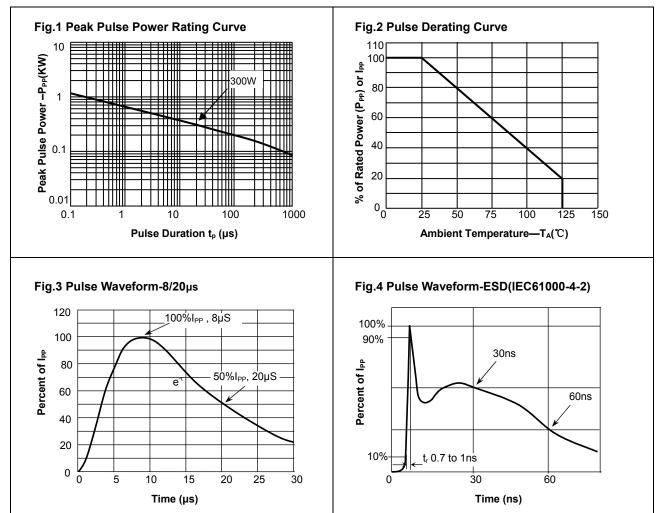
Applications

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

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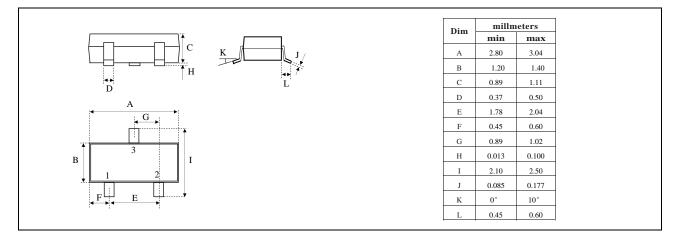
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Typical Characteristics ($T_{amb} = 25 \text{ °C}$ unless otherwise specified)

Package Dimensions





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Part number system

Product series (ESD)	
Package (SOT-23)	
Capacitance type (Normal capacitance)	
Working voltage (12V)	
Directional (Unidirectional)	

Marking



Ordering inormation

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

Reision history

Date	Revision	Changes
23-May-2012	1.0	Initial release

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