

### Features

- ◆ 540Watts peak pulse power ( $t_p = 8/20\mu s$ )
- ◆ SOD-323 package
- ◆ Bidirectional configurations
- ◆ Low clamping voltage
- ◆ Low leakage current
- ◆ Medium capacitance ( $C_j=20pF$  typ.)
- ◆ Protection one data/power line to:  
IEC 61000-4-2 ±30kV contact ±30kV air  
IEC 61000-4-4 (EFT) 40A (5/50ns)  
IEC 61000-4-5 (Lightning) 6A (8/20μs)

### Applications

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

### Mechanical data

- ◆ Case: SOD-323 (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)

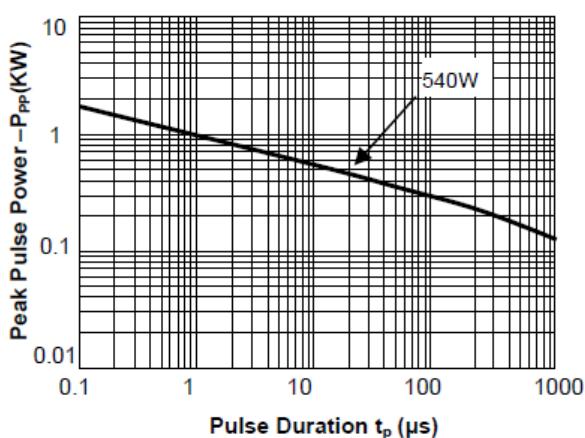
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_p=8/20\mu s$ )	$P_{PP}$	540	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	30/30	kV
Peak Pulse Current ( $t_p = 8/20\mu s$ )	$I_{PP}$	6	A
Junction Temperature	$T_J$	-55 to +150	°C
Storage temperature	$T_{STG}$	-55 to +150	°C

### Electrical Characteristics ( $T_A = 25$ °C unless otherwise specified)

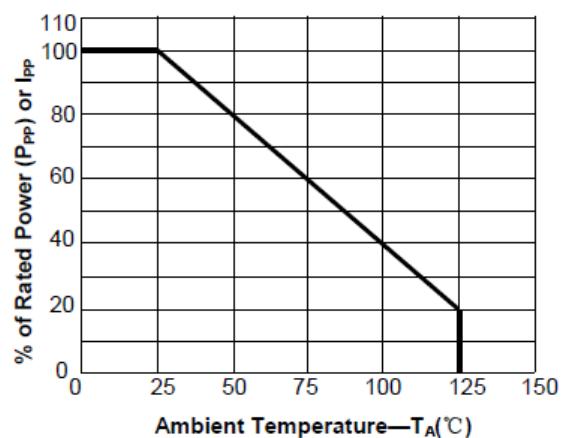
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				36	V
Reverse Breakdown Voltage	$V_{BR}$	$IT=1mA$	40			V
Reverse Leakage Current	$I_R$	$VR=36V$			1	uA
Clamping Voltage (IEC 61000-4-5)	$V_C$	$IPP=6A$		90		V
Junction Capacitance	$C_J$	$VR=0V, f=1MHz$		25		pF

## Typical Characteristics (Tamb = 25°C unless otherwise specified)

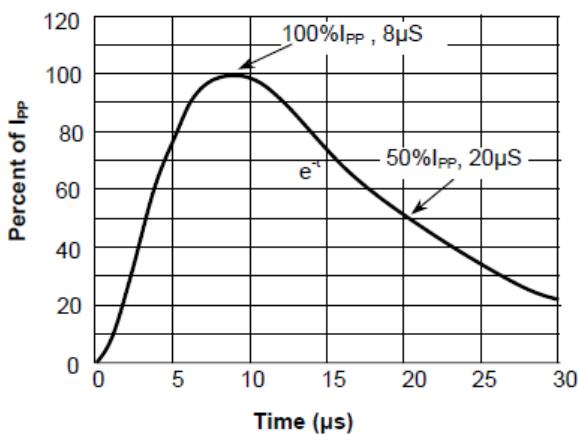
**Fig.1 Peak Pulse Power Rating Curve**



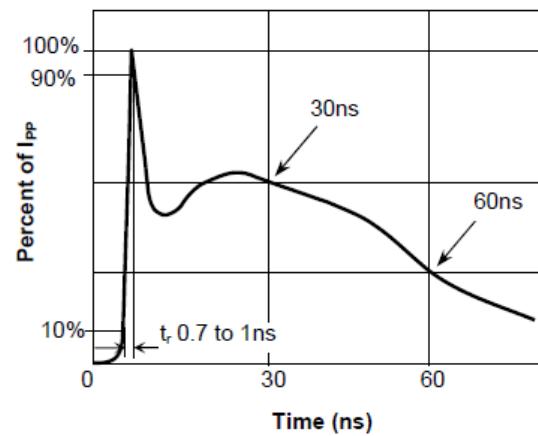
**Fig.2 Pulse Derating Curve**



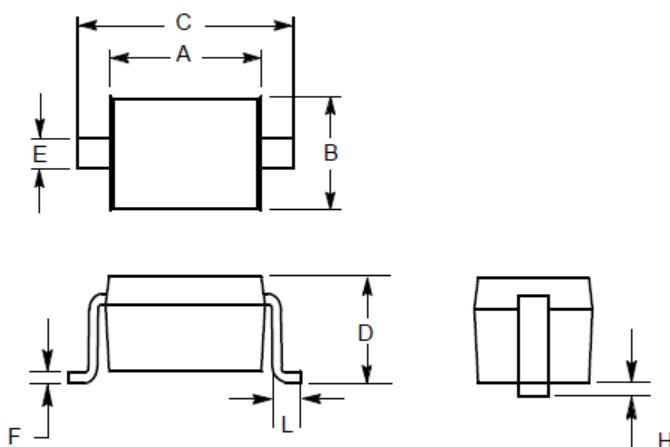
**Fig.3 Pulse Waveform-8/20 $\mu\text{s}$**



**Fig.4 Pulse Waveform-ESD(IEC61000-4-2)**



## Package Dimensions

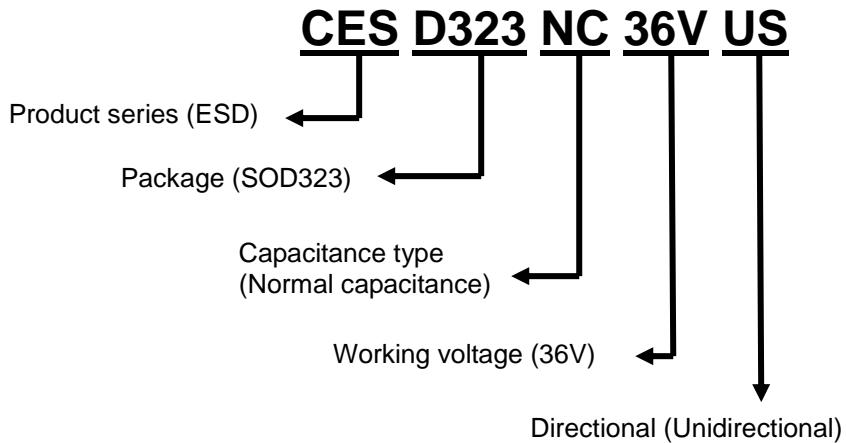


Dim	millimeters	
	min	max
A	1.60	1.90
B	1.15	1.45
C	2.39	2.70
D	0.80	1.10
E	0.25	0.40
F	0.10	0.20
H		0.10
L	0.20	-



## ESD Protection Diode in SOD-323

### Ordering information



Order code	Package	Packaging option	Base quantity	Packaging specification
CESD323NC36VUS	SOD-323	Tape and reel	3000pcs / reel	EIA STD RS-481

### Marking information

