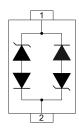


# Low Capacitance ESD Protection Diode in SOD-323

#### **Features**

- 360Watts peak pulse power (Tp = 8/20µs)
- SOD-323 package
- Bidirectional configurations
- Low clamping voltage
- Low leakage current
- Low capacitance (Cj=1pF 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) 20A (8/20µs)





#### **Mechanical Data**

- Case: SOD-323 (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**

- Ethernet 10/100/1000 Base T
- Cellular Phones
- Handheld Wireless Systems
- Personal Digital Assistant (PDA)
- USB Interface

### **Absolute Maximum Ratings**

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power (T <sub>P</sub> =8/20µs)	P <sub>PP</sub>	360	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	30/30	kV
Peak Pulse Current (T <sub>P</sub> = 8/20µs)	I <sub>PP</sub>	20	Α
Junction Temperature	TJ	-55 to +150	$^{\circ}$
Storage temperature	T <sub>STG</sub>	-55 to +150	$^{\circ}$

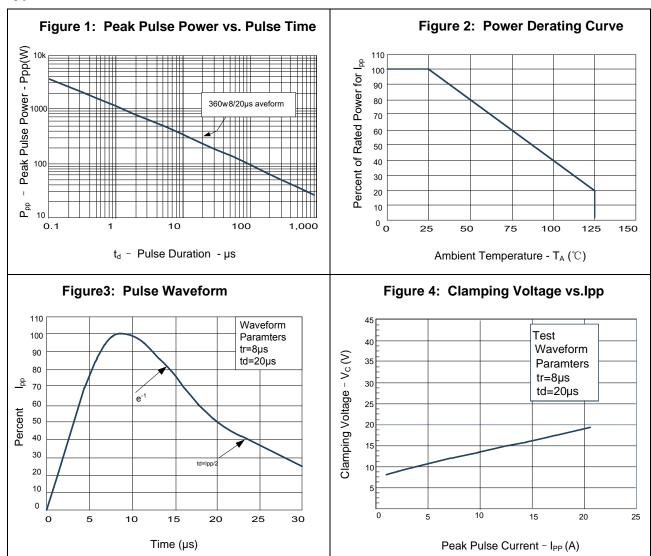
#### **Electrical Characteristics**

(T<sub>A</sub> = 25 °C unless otherwise specified)

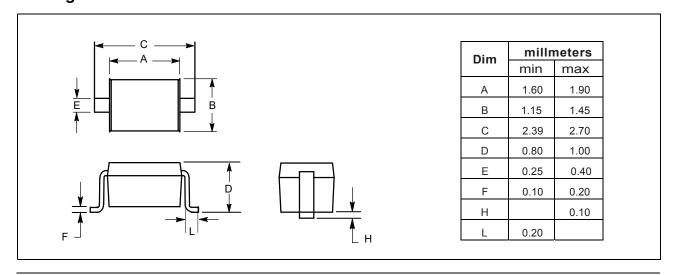
Parameter	Symbol	Condition	Min	Тур	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				3.3	V
Reverse Breakdown Voltage	$V_{BR}$	I <sub>T</sub> =1mA	4			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =3V			1	uA
Clamping Voltage (IEC 61000-4-5)	V <sub>C</sub>	I <sub>PP</sub> =20A			18	V
Junction Capacitance	CJ	V <sub>R</sub> =0V, f=1MHz		1		pF



# $\textbf{Typical Characteristics} \ \, (\text{T}_{\text{amb}} \text{ = } 25 \, ^{\circ}\text{C unless otherwise specified})$

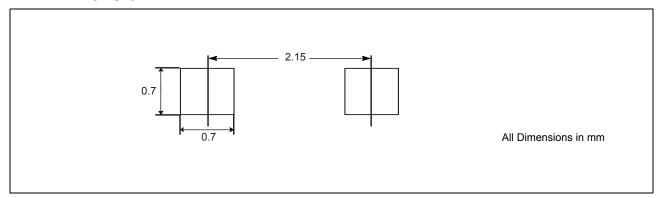


### **Package Dimensions**

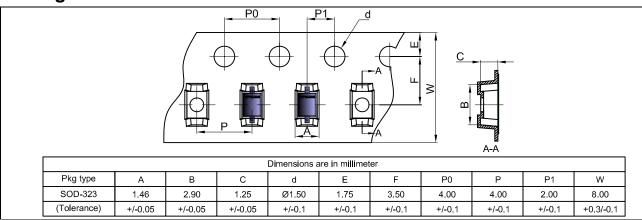




# **PAD Dimension**



# **Package Information**



# Marking



# **Ordering information**

Order code Package		Packaging option	Base quantity	Packaging specification	
CESD323LC3V3B	SOD-323	Tape and reel	3000pcs / reel	EIA STD RS-481	

## **Revision history**

<u> </u>		
Date	Revision	Changes
5-Jul2021	2.0	Update



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