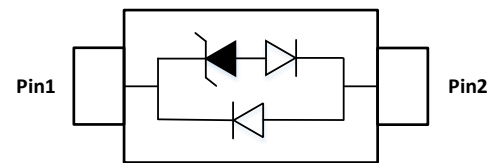


Features

- 350 Watts peak pulse power ($T_P = 8/20 \mu\text{S}$)
- SOD-323 package
- Protects one data or power line
- Operating voltage: 12V
- Low clamping voltage
- Complies with following standards:
 IEC 61000-4-2 (ESD) immunity test
 Air discharge: $\pm 30\text{kV}$
 Contact discharge: $\pm 30\text{kV}$
- IEC 61000-4-5 (Lightning) 11A (8/20 μS)
- Solid-state silicon-avalanche technology
- RoHS compliant



SOD-323



Schematic Diagram

Applications

- Smart Phone and Tablet PC
- TV and Set Top Box
- Wearable Devices
- PDA

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu\text{S}$)	P_{PP}	350	W
Peak Pulse Current ($T_P=8/20\mu\text{S}$)	I_{PP}	11	A
ESD per IEC 61000-4-2 (Air)	V_{ESD}	± 30	kV
ESD per IEC 61000-4-2 (Contact)		± 30	
Operating Temperature Range	T_J	-55 To +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 To +150	$^\circ\text{C}$

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

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Units
V_{RWM}	Reverse Working Voltage	-	-	-	12	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1\text{mA}$	13.3	-	-	V
I_R	Reverse Leakage Current	$V_{RWM}=12\text{V}$	-	-	1.0	μA
V_C	Clamping Voltage	$I_{PP}=1\text{A}, T_P=8/20\mu\text{S}$	-	-	19	V
		$I_{PP}=11\text{A}, T_P=8/20\mu\text{S}$	-	-	28.6	V
C_J	Junction Capacitance	$V_R=0\text{V}, f=1\text{MHz}$	-	1.0	-	pF

Typical Characteristic Curves

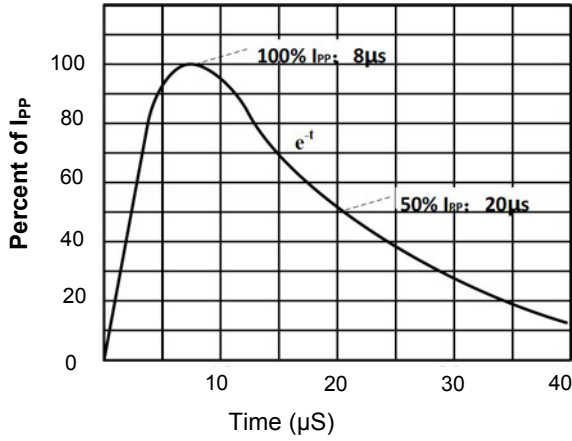


Figure 1. Pulse Waveform-8/20 μ s (IEC 61000-4-5) and (IEC 61643-321)

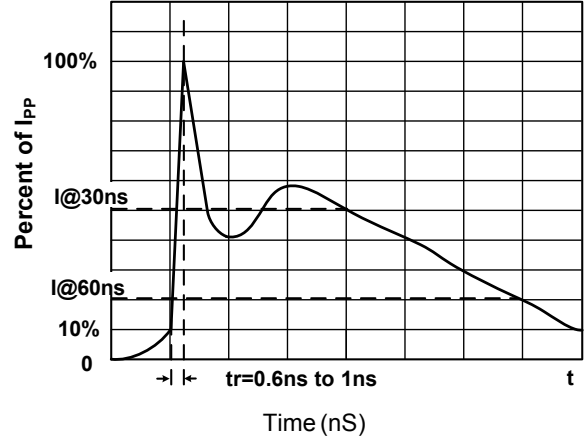


Fig.2 Pulse Waveform-ESD (IEC61000-4-2)

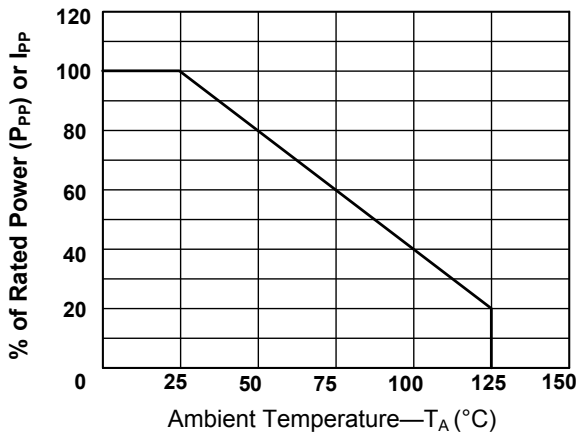


Fig.3 Pulse Derating Curve

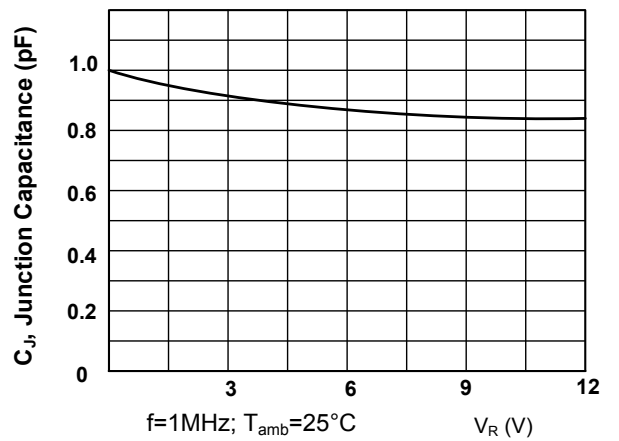
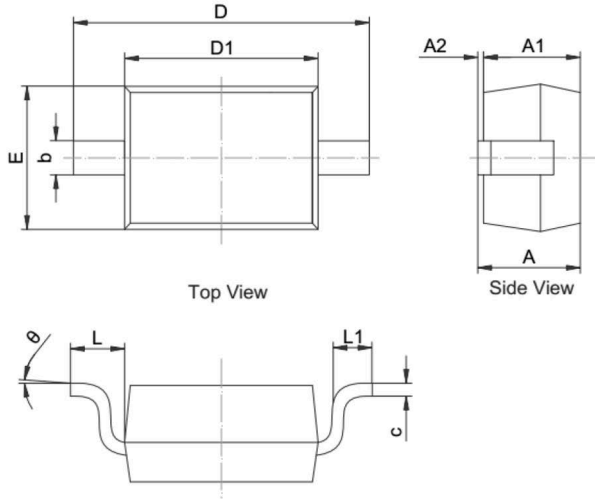


Fig. 4. Junction Capacitance vs V_R

Package Outline Dimensions SOD-323



Symbol	Milimeters		
	Min	Nom	Max
A	0.800	-	1.100
A1	0.800	-	0.900
A2	0.000	-	0.100
b	0.250	-	0.400
c	0.080	-	0.177
D1	1.600	1.700	1.800
D	2.300	-	2.800
E	1.150	-	1.400
L	0.475 REF		
L1	0.100	-	0.500
θ	0°	-	8°

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
GSEDC8U10	SOD-323	120	Tape & Reel	3,000pcs / Reel	RoHS compliant