

Features

- 350Watts peak pulse power($t_p=8/20\mu s$)
- Low leakage current
- Low clamping voltage
- Low capacitance:1.0pF (Typical)
- Response Time is Typically $<1ns$
- Solid-state Silicon-avalanche Technology
- IEC61000-4-2 (ESD): $\pm 30kV$ (contact) $\pm 30kV$ (air)
- IEC61000-4-4(EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning)20A (8/20 μs)



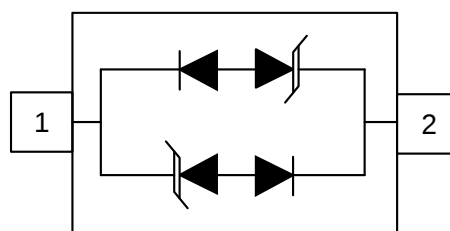
Applications

- Ethernet-10/100/1000 Base T
- Handheld-Wireless Systems
- USB Interface
- Personal Digital Assistant(PDA's)
- Cellular Phones

Mechanical Data

- SOD323 package
- Molding compound flammability rating: UL94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

Schematic & PIN Configuration



SOD-323

Absolute Maximum Rating($T_J=25^{\circ}\text{C}$ unless otherwise noted)

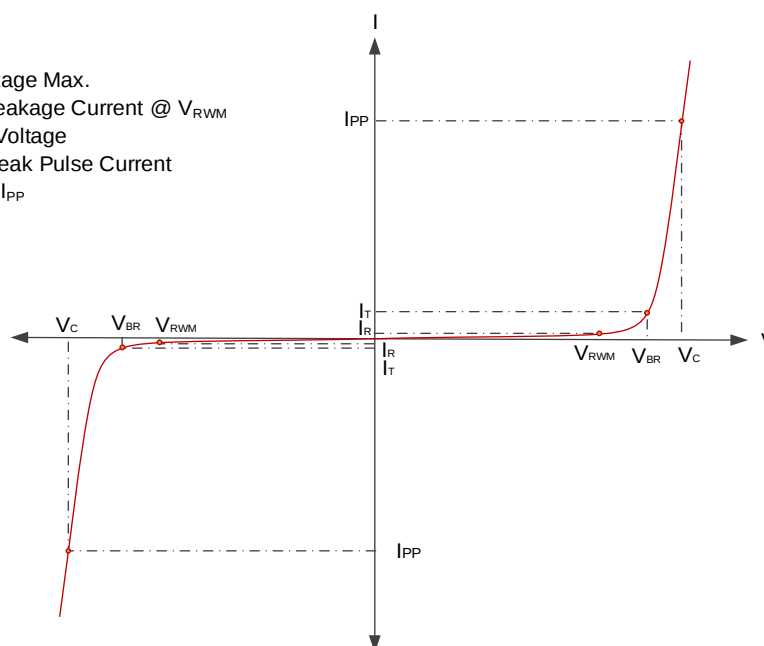
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p=8/20\mu\text{s}$)	P_{PP}	350	Watts
Peak Pulse Current ($t_p=8/20\mu\text{s}$)	I_{PP}	20	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	30 30	kV
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}\text{C}$
Junction Temperature	T_J	-55 to + 125	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55 to + 125	$^{\circ}\text{C}$

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

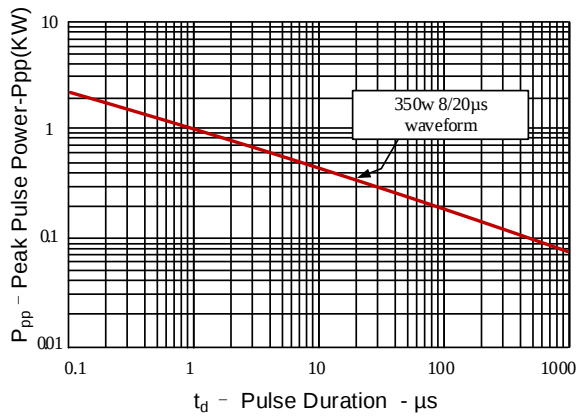
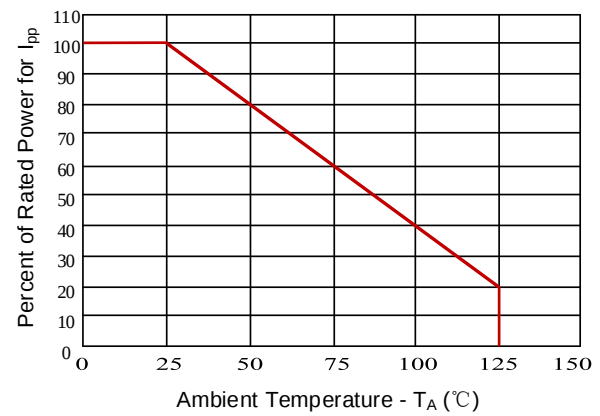
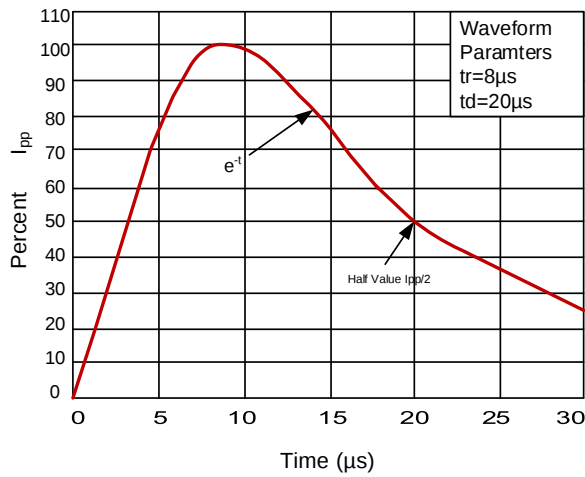
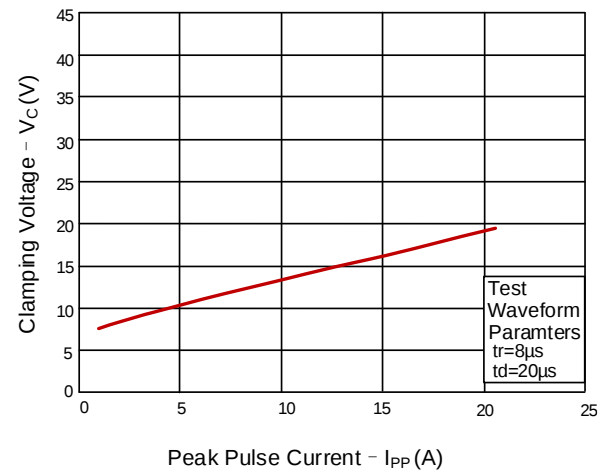
Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	4.0			V
Reverse Leakage Current	I_R	$V_{RWM}=3.3\text{V}, T=25^{\circ}\text{C}$			1	μA
Clamping Voltage	V_C	$I_{PP}=20\text{A}, t_p=8/20\mu\text{s}$			18	V
Junction Capacitance	C_j	$V_R = 0\text{V}, f = 1\text{MHz}$		1.0	1.3	pF

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

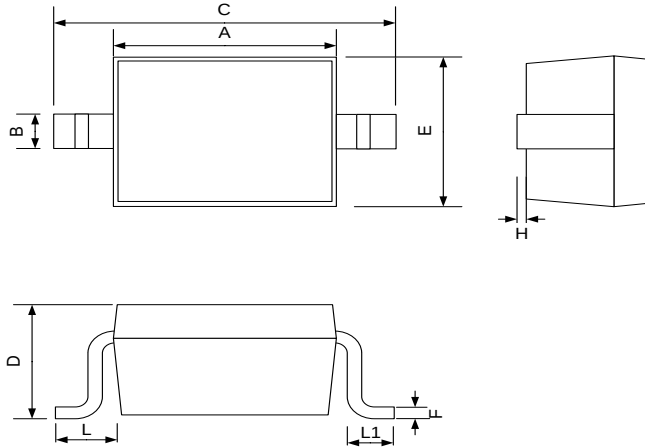
V_{RWM} Reverse Working Voltage Max.
 I_R Maximum Reverse Leakage Current @ V_{RWM}
 V_{BR} Reverse Breakdown Voltage
 I_{PP} Maximum Reverse Peak Pulse Current
 V_C Clamping Voltage @ I_{PP}



Typical Characteristic

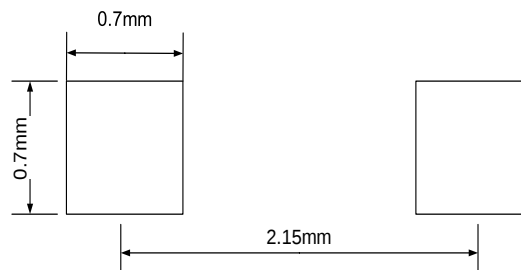
Figure 1: Peak Pulse Power vs. Pulse Time

Figure 2: Power Derating Curve

Figure3: Pulse Waveform

Figure 4: Clamping Voltage vs. Ipp


Outline Drawing-SOD323



COMMON DIMENSION				
SYMBOL	MILLIMETER		INCHES	
	MIN.	MAX.	MIN.	MAX.
A	1.600	1.800	0.063	0.071
B	0.250	0.350	0.010	0.014
C	2.500	2.700	0.098	0.106
D		1.000		0.039
E	1.200	1.400	0.047	0.055
F	0.080	0.150	0.003	0.006
L	0.475REF		0.019REF	
L1	0.250	0.400	0.010	0.016
H	0.000	0.100	0.000	0.004

Land Pattern *



* This Land Pattern is For Reference Purposes Only

Marking Code



Ordering Information

Part number	Package	Delivery	Reel size	MOQ
RLSD32A031LCB	SOD323	Tape and reel	7 inch	3k/reel