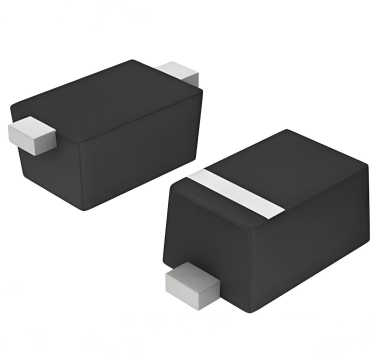
RLSD52A031V

Product code: 10.26.04.0310

Features



- 300W (t_p=8/20μs) Peak Pulse Power
- Uni-directional configurations
- Low clamping voltage
- Low leakage current
- Moisture sensitivity level: Level 3
- Solid-state silicon avalanche technology
- Meet IEC61000-4-2
  Contact discharge ±30kV
  Air discharge ±30kV

Applications

- Cell Phone Handsets and Accessorieses
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Peripherals
- Pagers

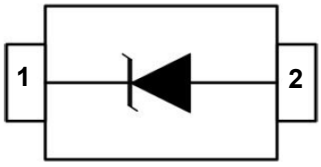
Meachanical Data

- SOD-523 package
- Molding compound flammability rating: UL94V-0
- Packaging: Tape and Reel(7 inch)

Agency Approvals

Icon	Description
RoHS	Compliance with (EU)2015/863
HF	Compliance with IEC61249-2-21:2003
Pb	Mean lead free

Schematic & PIN Configuration



Absolute Maximum Ratings (TA=25°C unless otherwise specified)

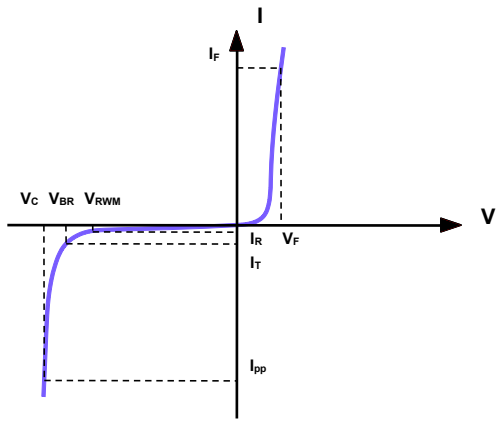
Parameter	Symbol	Value	Unit
Peak Pulse Power(t_p=8/20us)	P_{PK}	300	W
Peak Pulse Current(t_p=8/20us)	I_{PP}	20	A
Lead Soldering Temperature	T_L	260(10seconds)	℃
Storage Temperature	T_{STG}	**-55** to +150	℃
Operating Temperature Range	T_J	**-55** to +150	℃

Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Stand-Off Voltage	V_{RWM}				3.3	V
Breakdown Voltage	V_{BR}	I_T = 1mA	5	5.6	6.5	V
Reverse Leakage Current	I_R	V_{RWM} = 3.3V			1	μA
Clamping Voltage	V_C	I_{PP} = 1A, t_p=8/20us			10	V
Clamping Voltage	V_C	I_{PP} = 20A, t_p=8/20us		11	15	V
Junction Capacitance	C_J	V_R = 0V, f = 1MHz		195	250	pF

I-V Curve Characteristics

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Reverse Stand-Off Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Curent
I_F	Forward Current
V_F	Forward Voltage @ I_F



Note: 8/20μs pulse waveform.

Characteristics Cureves(TA=25°C unless otherwise Specified)

Fig 1. 8/20μs Pulse Waveform

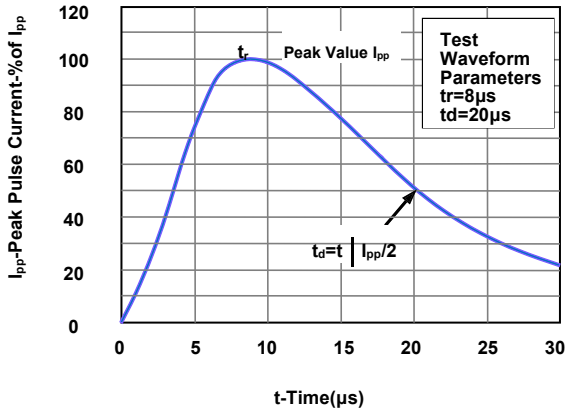


Fig 2. ESD Pulse Waveform (according to IEC61000-4-2)

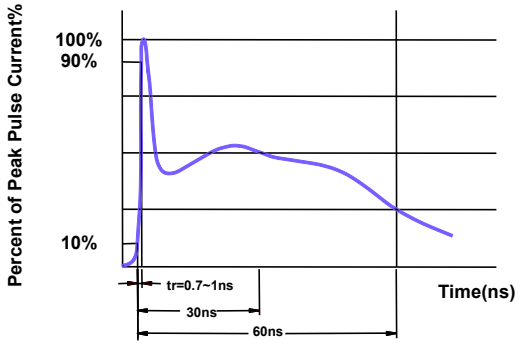


Fig 3. Power Derating Curve

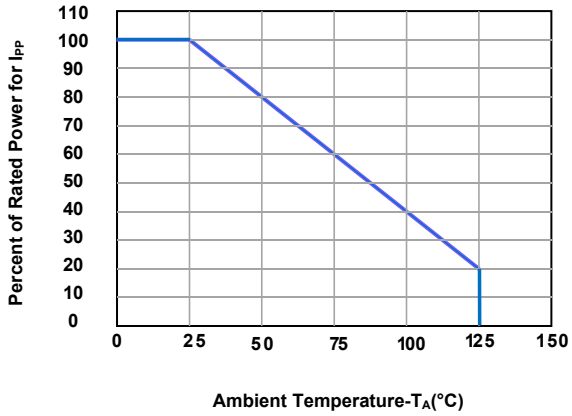


Figure 4.Clamping Voltage vs.Ipp

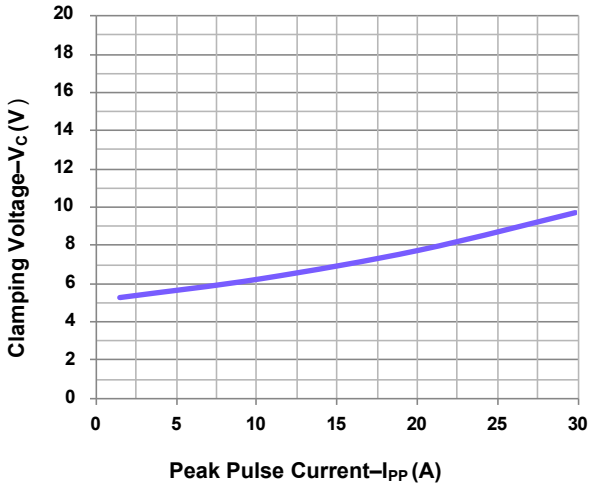


Fig 5. Peak Pulse Power vs.Pulse Time

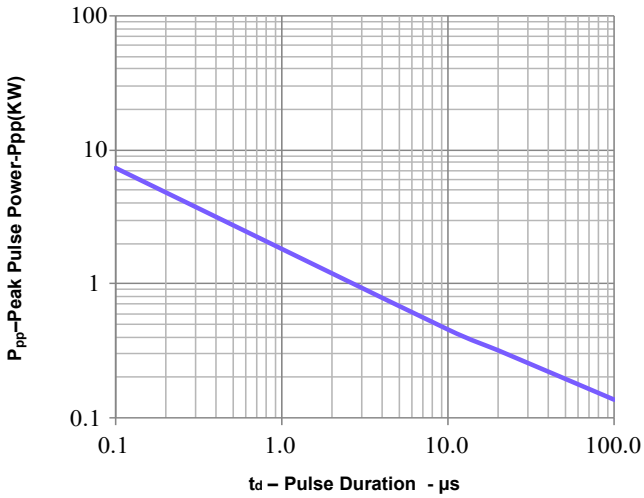
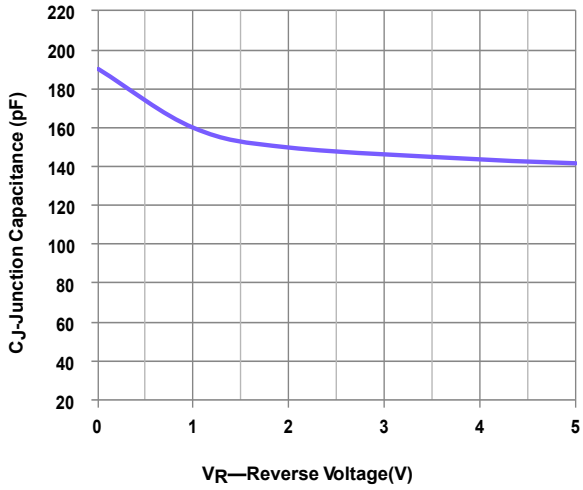
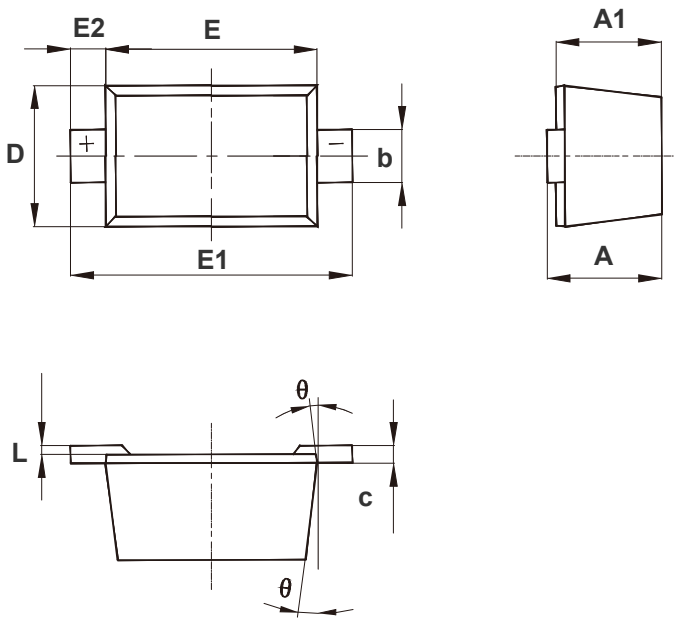


Figure 6. Junction Capacitance vs. Reverse Voltage

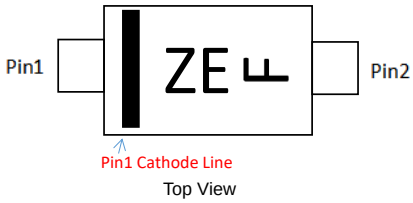


SOD-523 Package Outline



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.51	0.77	0.02	0.031
A1	0.50	0.70	0.020	0.028
b	0.25	0.35	0.01	0.014
c	0.08	0.15	0.003	0.006
D	0.75	0.85	0.03	0.033
E	1.1	1.3	0.043	0.051
E1	1.5	1.7	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.01	0.07	0.001	0.003
θ	7° REF		7° REF	

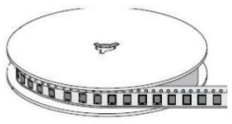
Marking Information



Top View

ZM = Device Code
F = Date Code

Packaging Information

	Reel	Inner Box	Carton
Size	φ178mm(7 inch)	215×205×205mm	435×435×230mm
Quantity	MPQ/MOQ: 1 reel=3000pcs	1 Inner box=10 reels=30,000pcs	1Carton=4 Inner boxes=120,000pcs
Photos			

Notice: 1、Each reel is placed in an aluminum foil bag and vacuum-packed separately.
2、Above packaging photos make from 3D software for reference only，please refer to actual product as the standard.