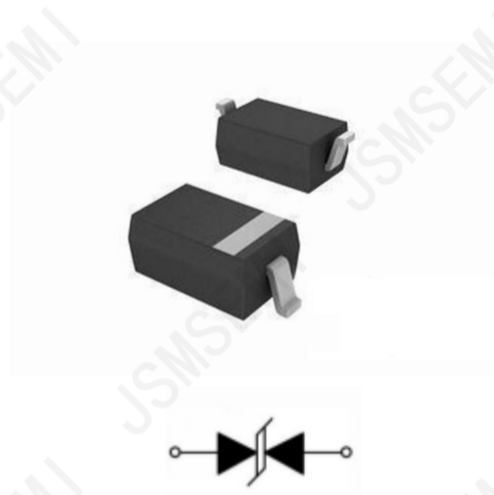


Features

- 350 Watts peak pulse power ($t_p=8/20\mu s$)
- Bidirectional configurations
- Solid-state silicon-avalanche technology
- Reverse Voltage: 15V, 24V
- Low clamping Voltage
- Low leakage current
- IEC61000-4-2 $\pm 30kV$ contact; $\pm 30kV$ air
- IEC 61000-4-4(EFT) 40A(5/50ns)
- IEC 61000-4-5(Lightning) 10/7A(8/20 μs)



Mechanical Characteristics

- SOD323 package
- Molding compound flammability rating:
UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

Applications

- Microprocessor base equipment
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- LIN-bus protection

Absolute Maximum Rating

Rating	Symler	Value	Units
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PP}	350	Watts
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	10/7	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)	$^{\circ}C$
Junction Temperature	T_J	-55 to + 150	$^{\circ}C$
Storage Temperature	T_{stg}	-55 to + 150	$^{\circ}C$

Electrical Characteristics

PIN1 to PIN2						
Parameter	Symler	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}	—	—	—	15.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	16.7	—	—	V
Reverse Leakage Current	I_R	$V_{RWM}=15V, T=25^{\circ}C$	—	—	0.2	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu s$	—	—	10	A
Clamping Voltage	V_C	$I_{PP}=10A, t_p=8/20\mu s$	—	27	—	V
Junction Capacitance	C_j	$V_R=0V, T=25^{\circ}C, f=1MHz$	—	35	40	pF

PIN2 to PIN1						
Parameter	Symler	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}	—	—	—	24.0	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	26.7	—	—	V
Reverse Leakage Current	I_R	$V_{RWM}=24V, T=25^{\circ}C$	—	—	0.2	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu s$	—	—	7	A
Clamping Voltage	V_C	$I_{PP}=7A, t_p=8/20\mu s$	—	40	45	V
Junction Capacitance	C_j	$V_R=0V, T=25^{\circ}C, f=1MHz$	—	35	40	pF

Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

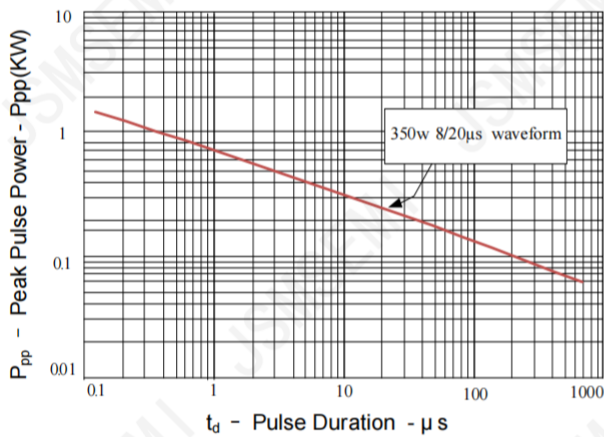


Figure 2: Power Derating Curve

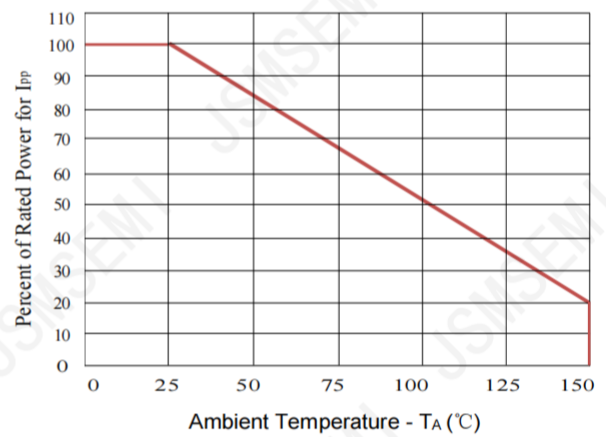


Figure 3: Pulse Waveform

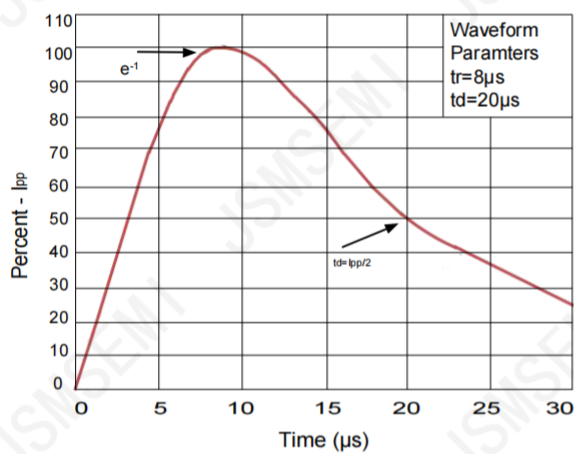
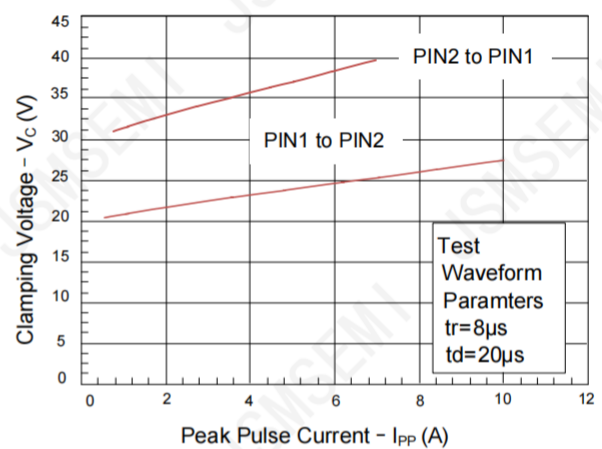
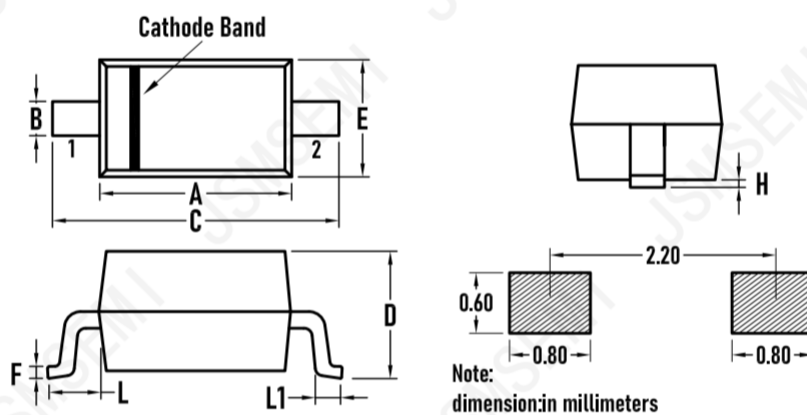


Figure 4: Clamping Voltage vs. I_{pp}



Outline Drawing—SOD-323



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	2.400	2.800	0.094	0.110
D	—	1.100	—	0.043
E	1.100	1.500	0.043	0.059
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

Revision History

Rev.	Change	Date
V1.0	Initial version	6/27/2021

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