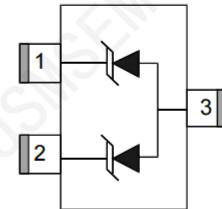


Features

- 300 Watts peak pulse power($t_p=8/20\mu s$)
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- IEC 61000-4-2 ± 15 kV contact ± 20 kV air
- IEC 61000-4-4(EFT)40A(5/50ns)
- IEC 61000-4-5(Lightning)4A(8/20 μs)



SOT-23 (Top View)

Mechanical Data

- SOT-23 package
- Molding compound flammability rating:UL94V-0
- Packaging:Tape and Reel
- RoHS/WEEE Compliant

Applications

- Dataline
- Automatic Teller Machines
- Networks
- Power line

Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power($t_p=8/20\mu s$)	P_{PP}	300	Watts
Peak Pulse Current($t_p=8/20\mu s$)(note1)	I_{pp}	4	A
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	V_{ESD}	20 15	kV
Lead Soldering Temperature	TL	260(10 seconds)	°C
Junction Temperature	TJ	-55 to +125	°C
Storage Temperature	T_{stg}	-55 to +125	°C

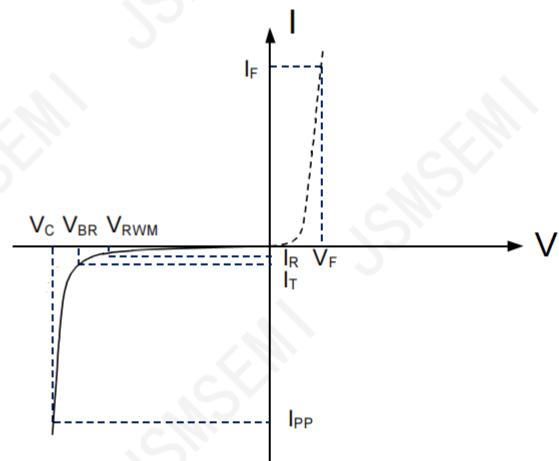
Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				36	V
Reverse Breakdown Voltage	V_{BR}	$IT=1mA$	40	45.5	50.0	V
Reverse Leakage Current	IR	$VRWM=36V, T=25^\circ C$		0.1	0.5	μA
Peak Pulse Current	IPP	$tp=8/20\mu s$			4	A
Clamping Voltage	VC	$IPP=4A, tp=8/20\mu s$		75		V
Junction Capacitance	C_j	$VR=0V, f=1MHz$ (Pin1、Pin2toPin3)		12		pF

Electrical Parameters (TA = 25°C unless otherwise noted)

Symbol	Parameter
IPP	Maximum Reverse Peak Pulse Current
VC	Clamping Voltage@IPP
$VRWM$	Working Peak Reverse Voltage
IR	Maximum Reverse Leakage Current@VRWM
VBR	Breakdown Voltage@IT
IT	Test Current

Note: 8/20μs pulsed waveform.



Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

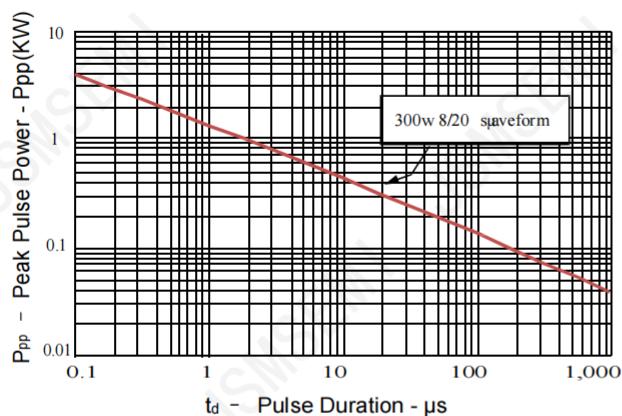


Figure 2: Power Derating Curve

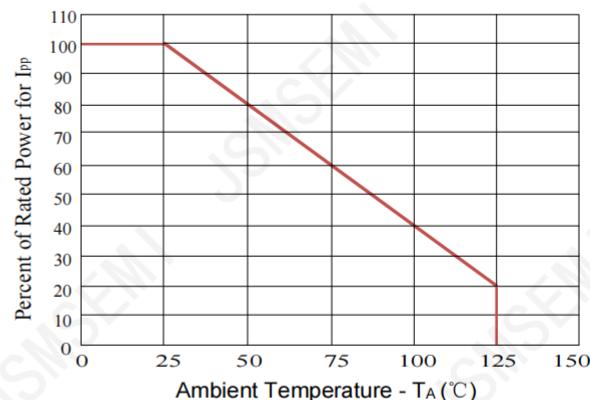


Figure 3: Pulse Waveform

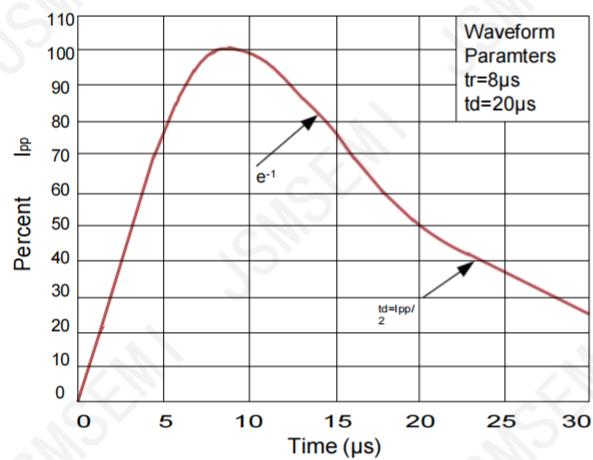
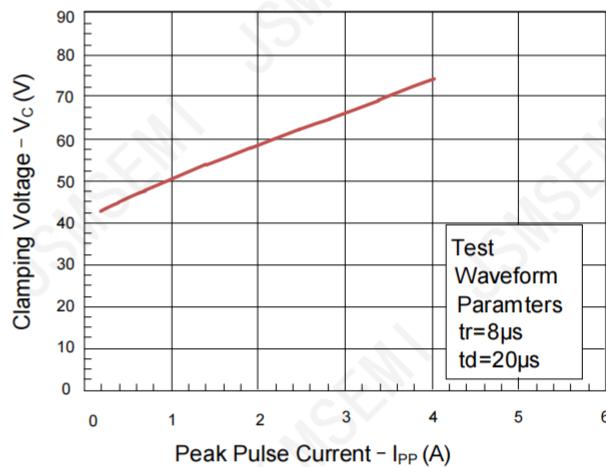
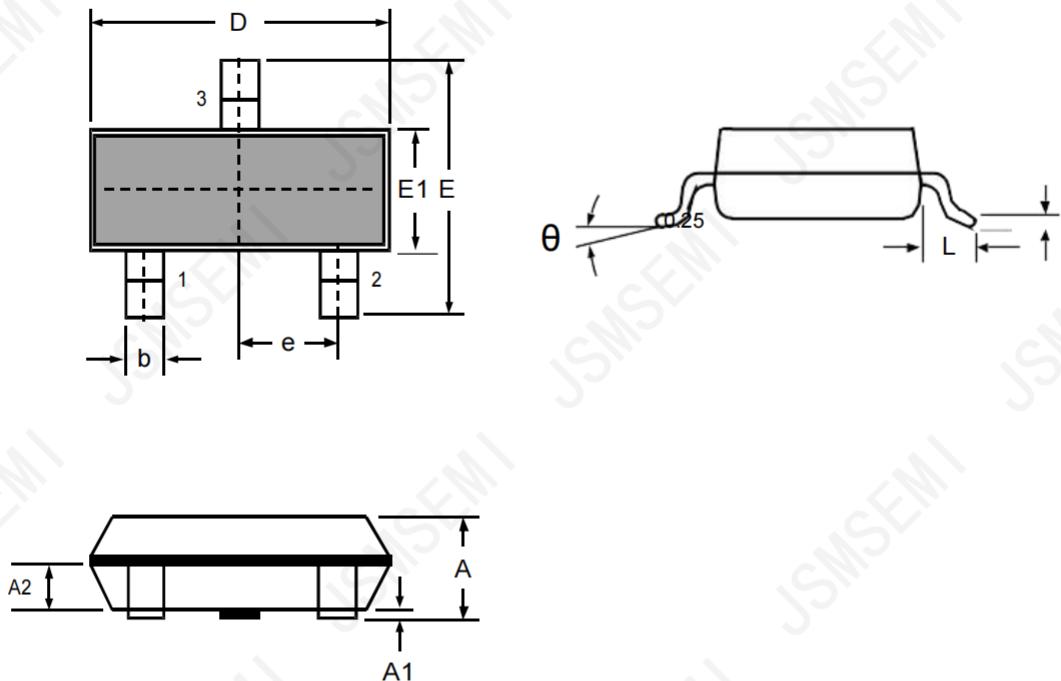


Figure 4: Clamping Voltage vs. Ipp



Outline Drawing – SOT-23


DIMENSIONS				
SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
D	2.800	3.000	0.110	0.118
b	0.300	0.500	0.012	0.020
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
e	0.950BSC		0.037BSC	
L	0.300	0.500	0.012	0.020
θ	0	8°	0	8°

Revision History

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

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