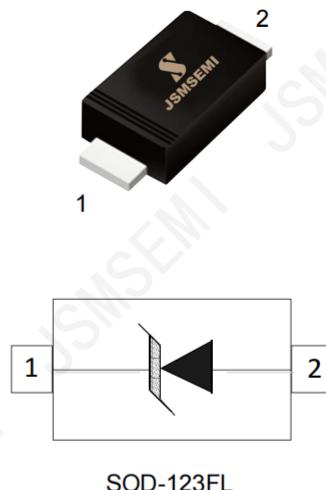


Features

- 3800 Watts peak pulse power ($t_p = 8/20\mu s$)
- Tiny SOD123FL package
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Protection one data/power line to:
- IEC 61000-4-2 $\pm 30\text{kV}$ contact $\pm 30\text{kV}$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 120A (8/20 μs)



Mechanical Data

- SOD123FL package
- Molding compound flammability rating:
UL 94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant1.7

Applications

- Cell Phone Handsets and Accessories
- Microprocess or basede quipment
- Personal Digital Assistants(PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation

Absolute Maximum Rating

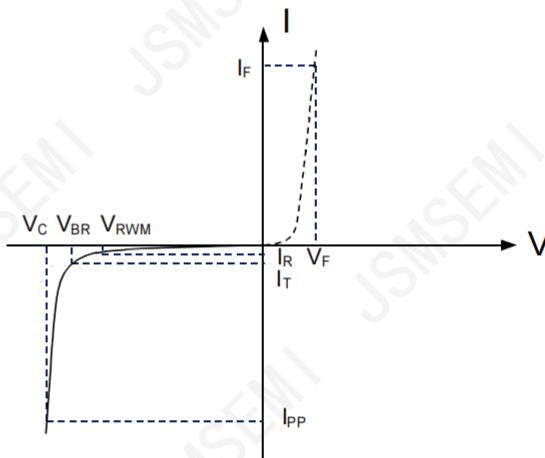
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	3800	Watts
Peak Pulse Current ($t_p = 8/20\mu s$) (note1)	I_{pp}	120	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2(Contact)	V_{ESD}	30 30	kV
Lead Soldering Temperature	T_L	260(10seconds)	°C
Junction Temperature	T_J	-55 to + 125	°C
Storage Temperature	T_{stg}	-55 to + 125	°C

Electrical Characteristics

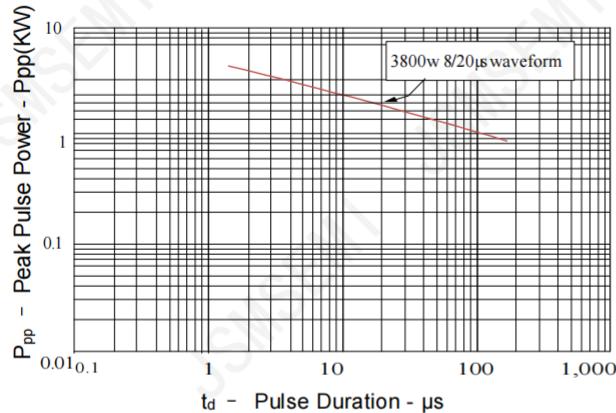
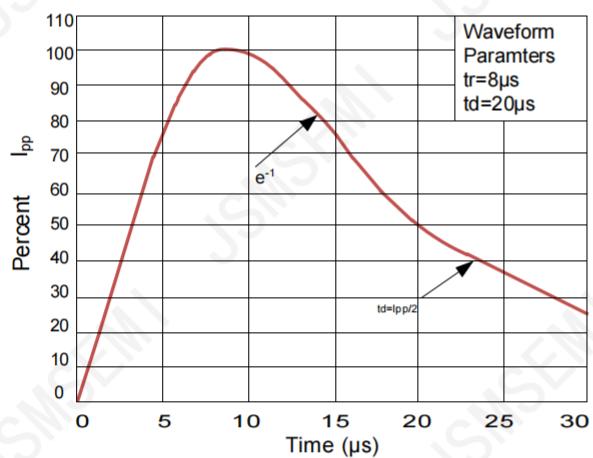
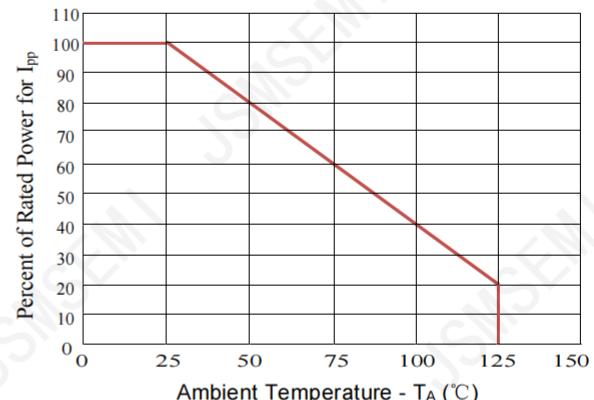
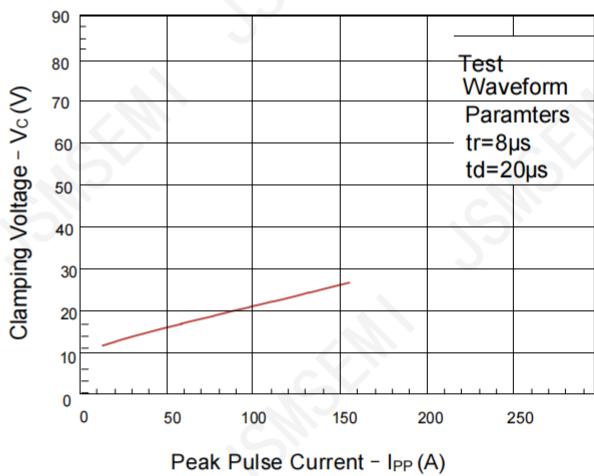
Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				15	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	16.7			V
Reverse Leakage Current	I_R	$V_{RWM}=15\text{V}, T=25^\circ\text{C}$		0.5	1.0	μA
Peak Pulse Current	I_{PP}	$t_p=8/20\mu\text{s}$		120		A
Clamping Voltage	V_c	$I_{PP}=120\text{A}, t_p=8/20\mu\text{s}$		32		V
Junction Capacitance	C_j	$V_R = 0\text{V}, f=1\text{MHz}$		1020		pF

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

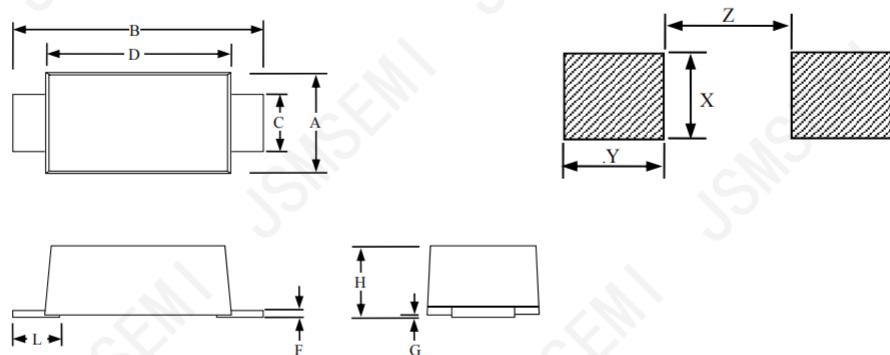
Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_c	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current@ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current

 Note:.. 8/20 μs pulse waveform.


Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

Figure3: Pulse Waveform

Figure 2: Power Derating Curve

Figure4: Clamping Voltage vs.Ipp


Outline Drawing



Dimension	Inches			Millimeters		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.059		0.079	1.5		2
B	0.134		0.154	3.4		3.9
C	0.028		0.047	0.7		1.2
D	0.098		0.114	2.5		2.9
F	0.002		0.01	0.05		0.26
G	-		0.004	-		0.1
H	0.037		0.053	0.95		1.35
L	0.014		0.035	0.35		0.9
X		0.055			1.4	
Y		0.051			1.3	
Z		0.063			1.6	

Revision History

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

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