

Single Line Bi-directional TVS Diode for EOS

General description

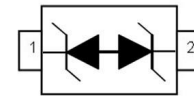
EOS/ESD Protection Diode in SOD-123FL

FEATURES

- 3600Watt peak pulse power ($t_p=8/20\mu S$)
- Low leakage current
- Low clamping voltage
- High capacitance ($C_j=520$ pF typ.)
- IEC 61000-4-2 ± 30 Kv Contact ± 30 Kv air.
- RoHS Compliant



SOD-123FL Package



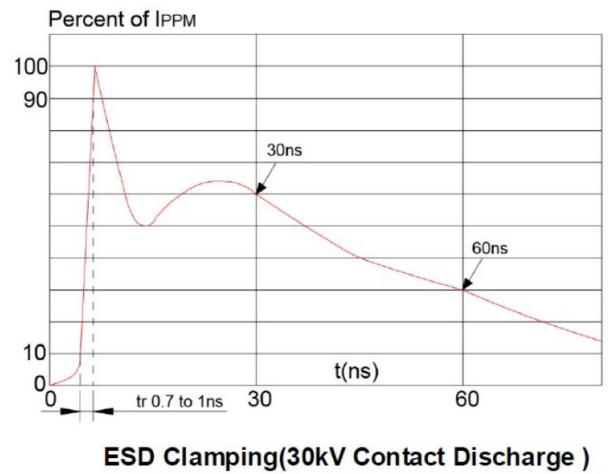
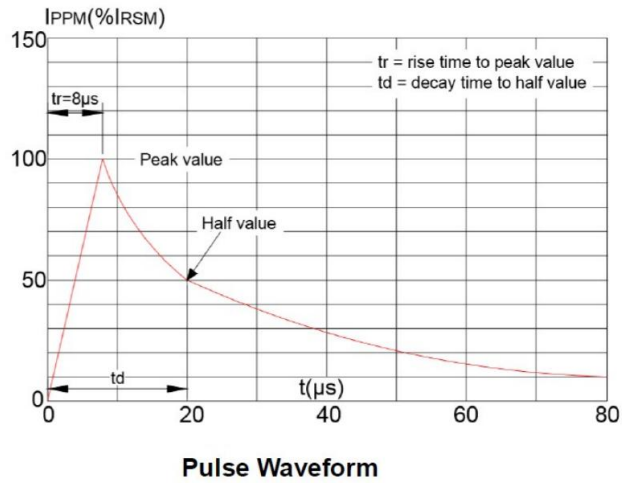
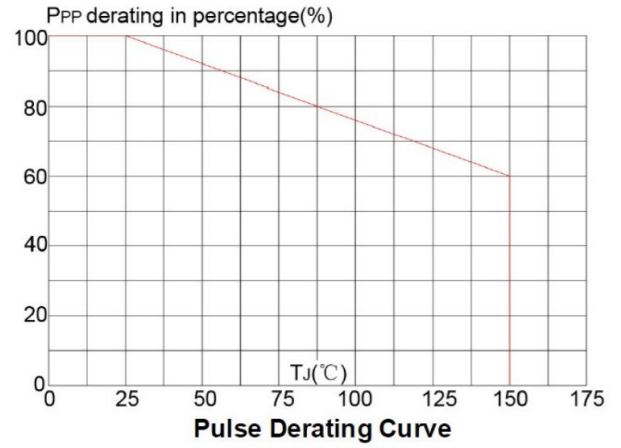
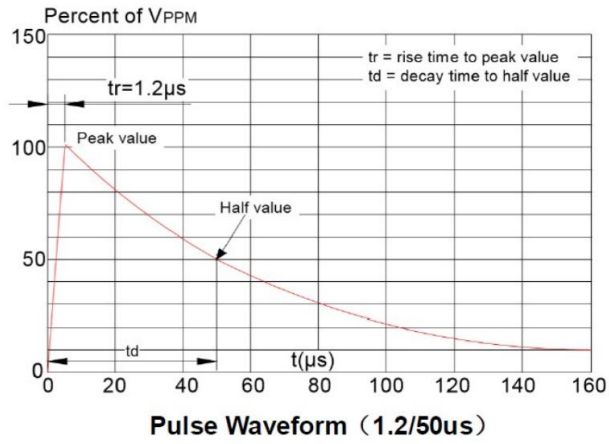
Absolute Maximum Ratings ($T_A = 25^\circ C$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Contact)	± 30	kV
	ESD per IEC 61000-4-2 (Air)	± 30	
P_{PP}	Peak Pulse Power (8/20 μs)	3600	W
T_{OPT}	Operating Temperature	-55~125	$^\circ C$
T_{STG}	Storage Temperature	-55~150	$^\circ C$
T_L	Lead Soldering Temperature	260(10sec)	$^\circ C$

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

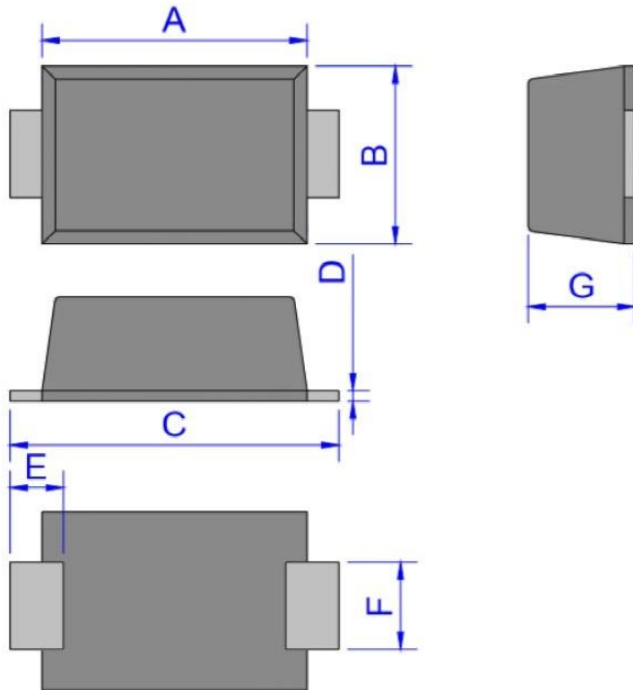
Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				7.0	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1mA$	8.0		10.0	V
I_R	Reverse Leakage Current	$V_{RWM} = 7V$			1.0	μA
I_{PP}	Peak Pulse Current	$t_p = 8/20\mu s$			200	A
V_C	Clamping Voltage	$I_{PP} = 200A, t_p = 8/20\mu s$			18	V
C_J	Junction Capacitance	$V_R = 0V, f = 1MHz$		520	550	pF

ELECTRICAL CHARACTERISTICS CURVE



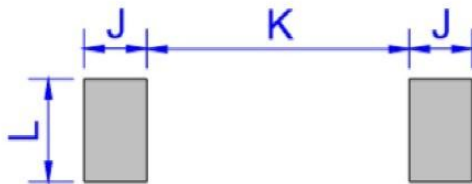
DSD07DFMC

SOD-123FL PACKAGE OUTLINE DIMENSIONS



Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.60	3.00	0.102	0.118
B	1.60	2.00	0.063	0.079
C	3.45	3.95	0.136	0.156
D	0.10	0.25	0.004	0.01
E	0.3	0.9	0.012	0.035
F	0.80	1.20	0.031	0.047
G	0.95	1.35	0.037	0.053
J	1.30		0.051	
K		1.70		0.067
L	1.30		0.051	

Recommend Land Pattern (Unit: mm)



Note:

This recommended land pattern is for reference purpose only.

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