

## Product Summary

The GESDS24VD1F1 is designed to protect voltage sensitive electronic components from ESD and other transients. Excellent clamping capability, low leakage, low capacitance, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium. Because of its small size, it is suited for use in digital cameras, cellular phones, MP3 players and many other portable applications where board space is at a premium.

## Feature

- Low reverse stand-off voltage: 24V
- Low leakage current
- 8000W Peak pulse power per line ( $t_P = 8/20\mu s$ )
- SOD-123FL package
- Response time is typically  $< 1ns$
- Protect one I/O or power line

## Application

- Cell phone handsets and accessories
- Personal digital assistants (PDA's)
- Notebooks, desktops and servers
- Portable instrumentation
- Cordless phones
- Digital cameras
- Peripherals
- MP3 players
- Digital cameras

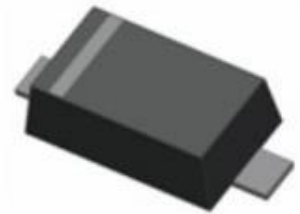
## Marking:



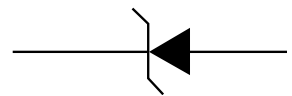
Front Side

24D = Device Code

## SOD-123FL



chematic diagram

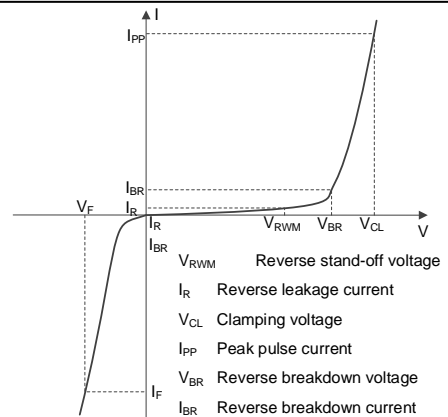


## Absolute Maximum Ratings ( $T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
IEC 61000-4-2 ESD Voltage	Air Model	$\pm 30$	KV
IEC 61000-4-2 ESD Voltage	Contact Model	$\pm 30$	
ESD Voltage	Per Human Body Model	$\pm 16$	
ESD Voltage	Machine Model	$\pm 0.4$	
Peak Pulse Power	$P_{PP}$	8000	W
Peak Pulse Current	$I_{PP}$	200	A
Lead Solder Temperature – Maximum (10 Second Duration)	$T_L$	260	$^\circ\text{C}$
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55~ +150	$^\circ\text{C}$

## Electrical Parameter

Symbol	Parameter
$V_C$	Clamping Voltage @ $I_{PP}$
$I_{PP}$	Peak Pulse Current
$V_{BR}$	Breakdown Voltage @ $I_T$
$I_T$	Test Current
$I_R$	Reverse Leakage Current @ $V_{RWM}$
$V_{RWM}$	Reverse Standoff Voltage



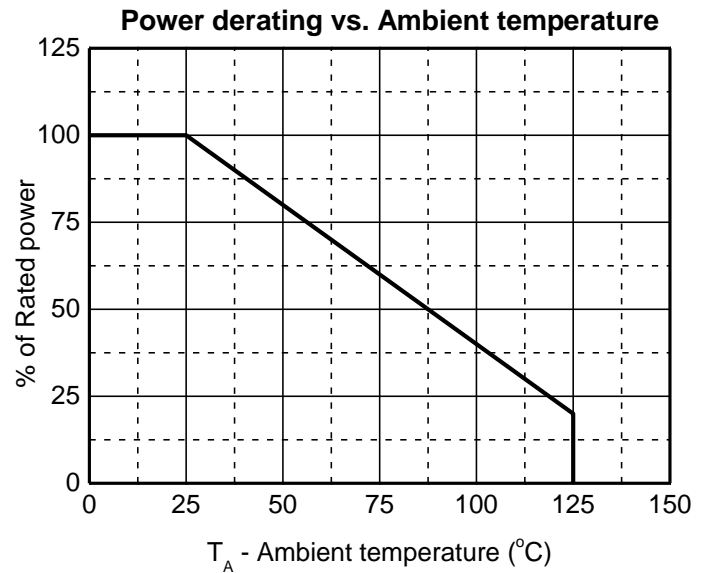
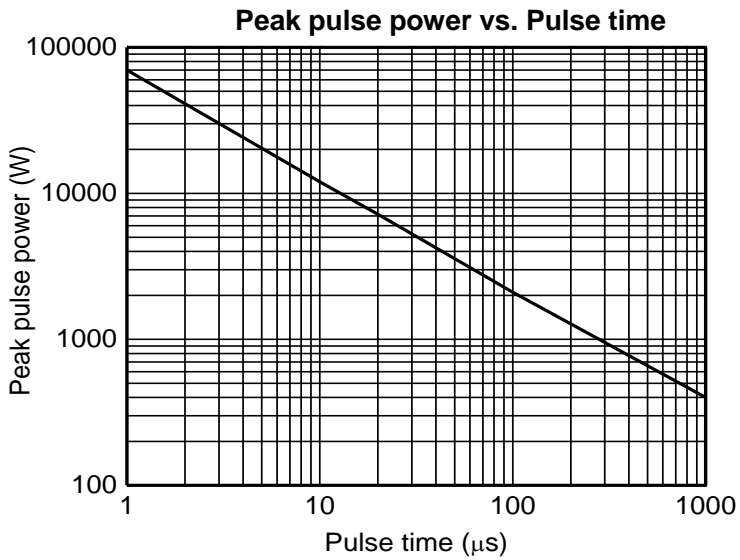
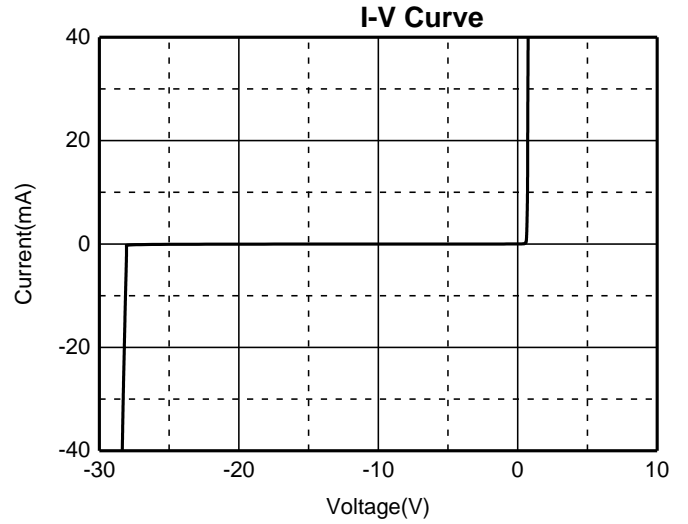
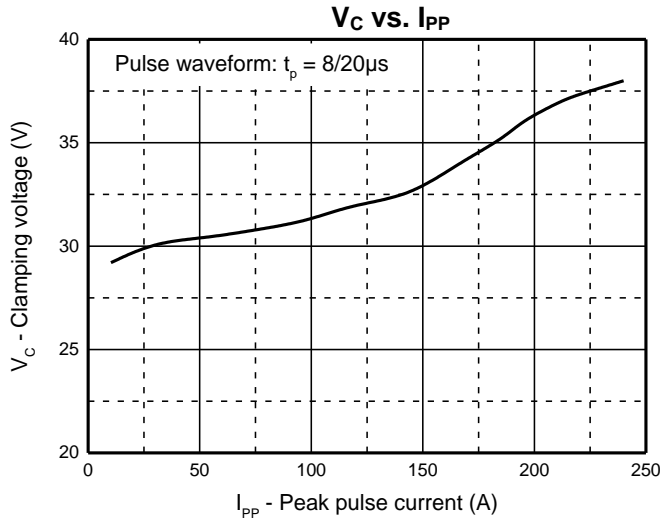
V-I characteristics for a Uni-directional TVS

## Electrical Characteristics ( $T_a=25^\circ\text{C}$ unless otherwise specified)

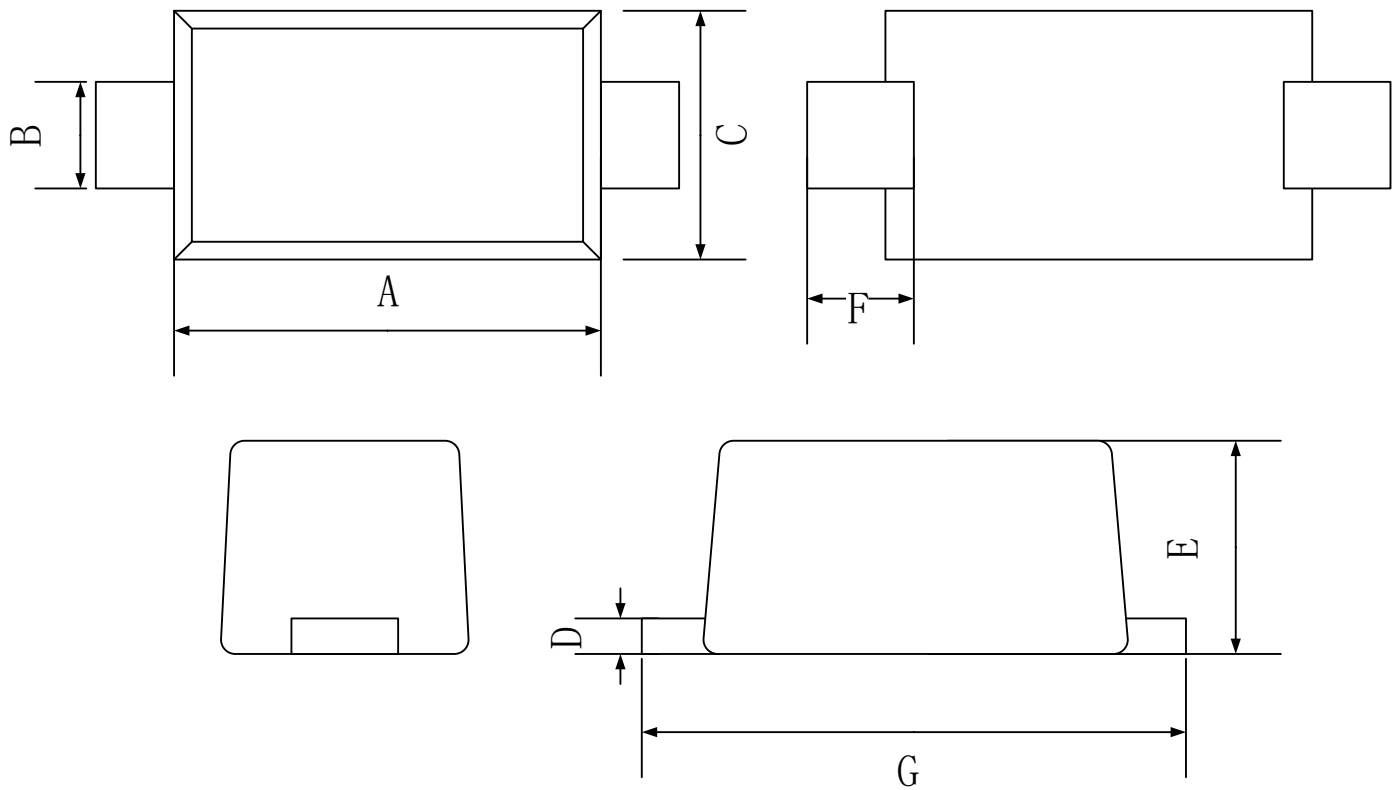
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse stand-off voltage	$V_{RWM}$				24	V
Reverse leakage current	$I_R$	$V_{RWM}=24\text{V}$			1	$\mu\text{A}$
Breakdown voltage	$V_{BR}^{1)}$	$I_T=1\text{mA}$	26.7		29.5	V
Clamping voltage	$V_{C1}$	$I_{PP}=200\text{A}(8/20\mu\text{S})$		36	40	V
Junction capacitance	$C_j$	$V_R=0\text{V}, f=1\text{MHz}$		600		pF

1)  $V_{BR}$  is measured with a pulse test current  $I_T$  at an ambient temperature of  $25^\circ\text{C}$

**Typical Characters**



## SOD-123FL Package Outline Dimensions



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	2.85	2.95
B	0.99	1.01
C	1.75	1.85
D	0.10	0.20
E	0.95	1.05
F	0.65	0.85
G	3.75	4.05

单击下面可查看定价，库存，交付和生命周期等信息

[>>GP\(格瑞宝\)](#)