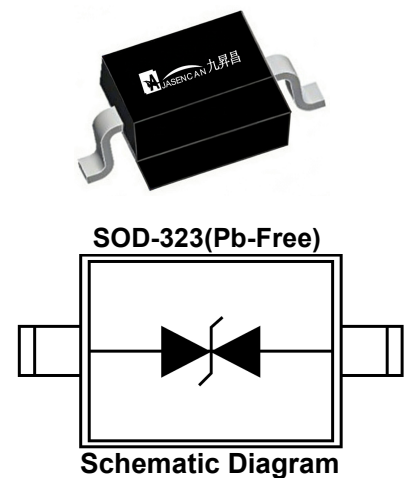


### General Description

The JS4V5H3DU is designed to protect voltage sensitive components from damage or latch-up due to surge current. Excellent clamping capability and fast response time provide best in class protection on designs that are exposed to surge current protection for board level. Because of its small size and uni-directional design, this product is very suitable for consumer electronics applications that require surge protection.

### Specification Features

- Small Body Outline Dimensions: nom 0.066" x 0.049" (1.7x1.25mm)
- Low Clamping Voltage:  $V_C=18V@I_{PP}=160A$
- Reverse Working (Stand-off) Voltage: 4.5 V
- Low Leakage
- Response Time is Typically < 1 ns
- IEC61000-4-2 Level 4 ESD Protection



### Application

- Mobile Internet Devices (MID), PAD and portable devices
- TVs, Peripherals and monitors
- Set-top boxes, game consoles and accessories

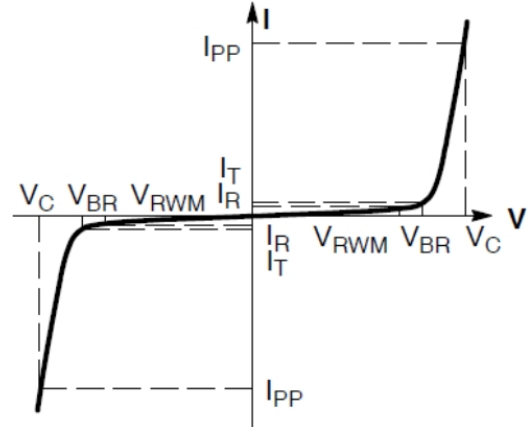


### Maximum Ratings

Rating	Symbol	Value	Unit
ESD according to IEC61000-4-2 air discharge	$V_{ESD}$	±30	kV
ESD according to IEC61000-4-2 contact discharge		±30	kV
Peak Power Per 8 x 20µs Waveform	$P_{PK}$	2800	W
Junction Temperature Range	$T_J$	-40 to +125	°C
Storage Temperature Range	$T_{stg}$	-55 to +150	
Lead Solder Temperature – Maximum (10 Second Duration)	$T_L$	260	°C

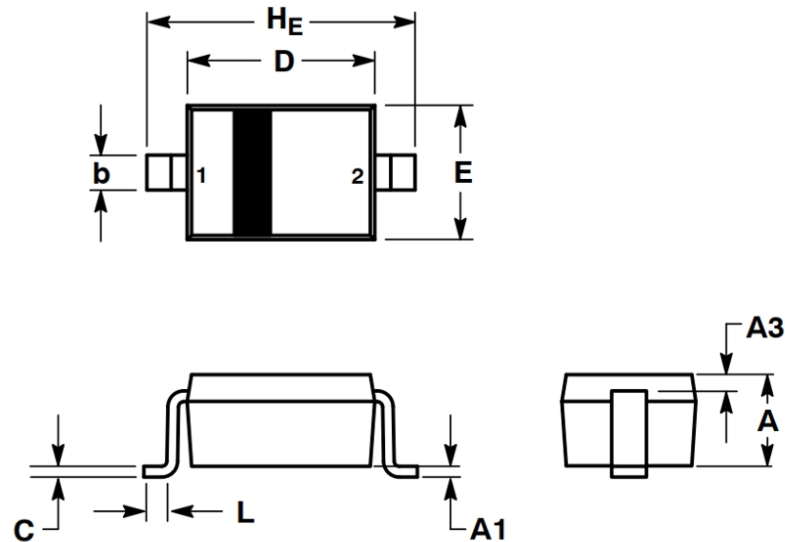
**Electrical Characteristics( $T_J = 25^\circ\text{C}$  unless otherwise specified)**

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 @ $V_{RWM}$
$I_T$	Test Current
$V_{BR}$	Breakdown Voltage @ $I_T$
$P_{PK}$	Peak Power Dissipation
C	Max. Capacitance @ $V_R = 0$ and freq.=1 MHz



Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	$V_{RWM}$				4.5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1\text{mA}$	4.6		6	V
Reverse Leakage Current	$I_R$	$V_{RWM}=4.5\text{V}$			0.5	$\mu\text{A}$
Clamping Voltage	$V_C$	$I_{PP}=40\text{A}, t_p=8/20\mu\text{s}$			8	V
		$I_{PP}=160\text{A}, t_p=8/20\mu\text{s}$			18	
Junction Capacitance	$C_J$	$V_R=0\text{V}, f=1\text{MHz}$			480	pF

## Package Outline Dimensions


**SOD-323**

	Millimeters			Inches		
	Min. (mm)	Typ. (mm)	Max. (mm)	Min. (in)	Typ. (in)	Max. (in)
A	0.70	0.80	0.90	0.0276	0.0315	0.0354
A1	0.00	0.05	0.10	0.0000	0.0020	0.0039
A3	0.2REF			0.0079REF		
b	0.25	0.30	0.35	0.0098	0.0118	0.0138
C	0.10	0.15	0.20	0.0039	0.0059	0.0079
D	1.65	1.725	1.80	0.0650	0.0679	0.0709
E	1.20	1.30	1.40	0.0472	0.0512	0.0551
HE	2.50	2.60	2.70	0.0984	0.1024	0.1063
L	0.475REF			0.0187REF		

## Ordering information

Device	Package	Reel	Marking	Shipping
JS4V5H3DU	SOD-323 (Pb-Free)	7"	48D	3000 / Tape & Reel

### Load with information

