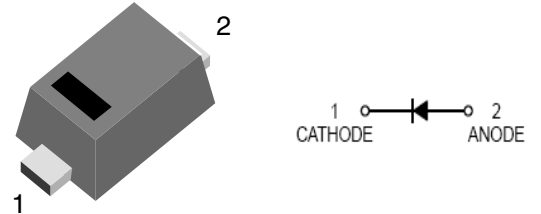


## Fast Switching Diode in SOD-523

### Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



### Mechanical Data

- Case: SOD-523 (plastic package).  
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**  
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:  
260 °C/10 sec. at terminals

### Applications

- High Speed Switching and Reverse Polarity Protection
- High Speed Rectifying Applications
- Consumer, Automotive and Telecommunication Industry

### Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

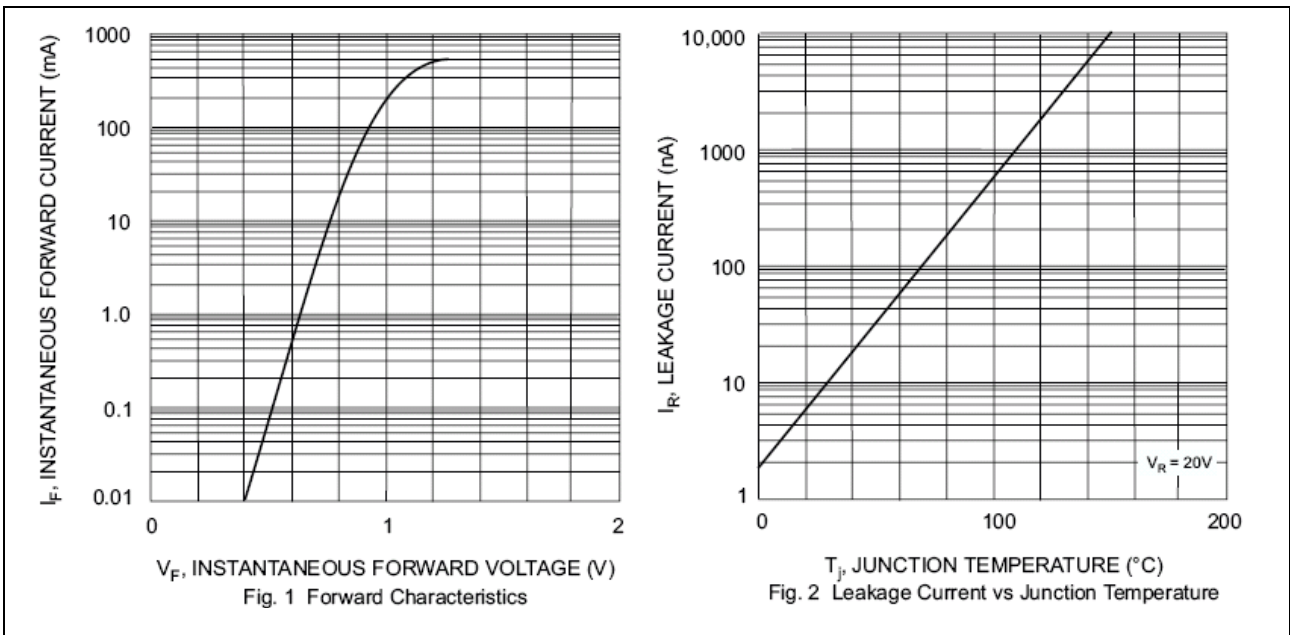
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	75	V
Forward Continuous Current	$I_{FM}$	300	mA
Average Rectified Output Current	$I_o$	150	mA
Non-Repetitive Peak Forward Surge Current @t=1.0 μs @t=1.0 s	$I_{FSM}$	2.0 1.0	A
Power Dissipation	$P_D$	150	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	°C/W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	°C

## Electrical Characteristics

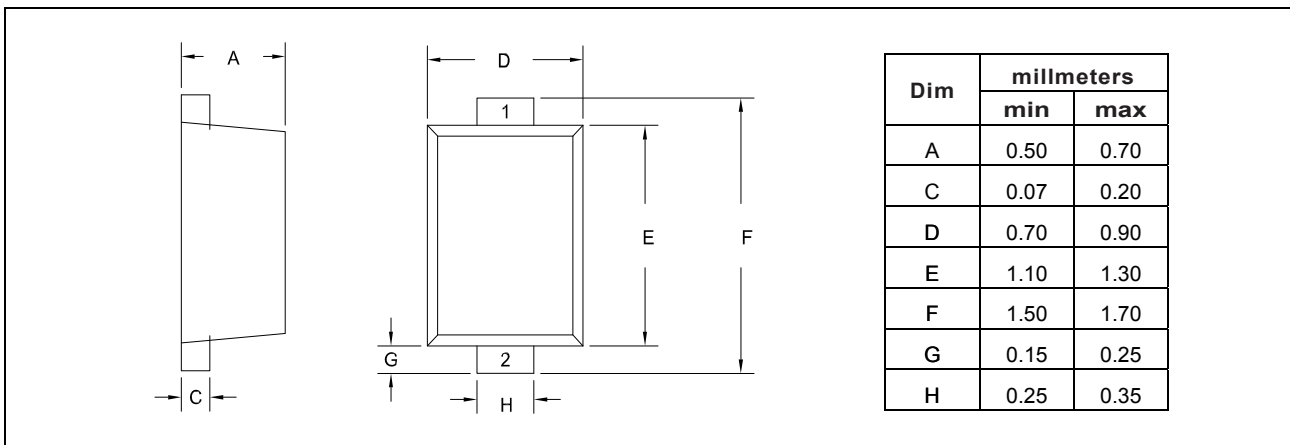
( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Min	Max	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	75	-	V	$I_R = 1.0\mu\text{A}$
Forward Voltage	$V_F$	-	0.715 0.855 1.0 1.25	V	$I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$
Reverse Current	$I_R$	-	1.0 25	$\mu\text{A}$ nA	$V_R = 75\text{V}$ $V_R = 20\text{V}$
Junction Capacitance	$C_J$	-	2.0	pF	$V_R = 0, f = 1.0\text{MHz}$
Reverse Recovery Time	$t_{rr}$	-	4.0	ns	$I_F = I_R = 10\text{mA}$ , $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

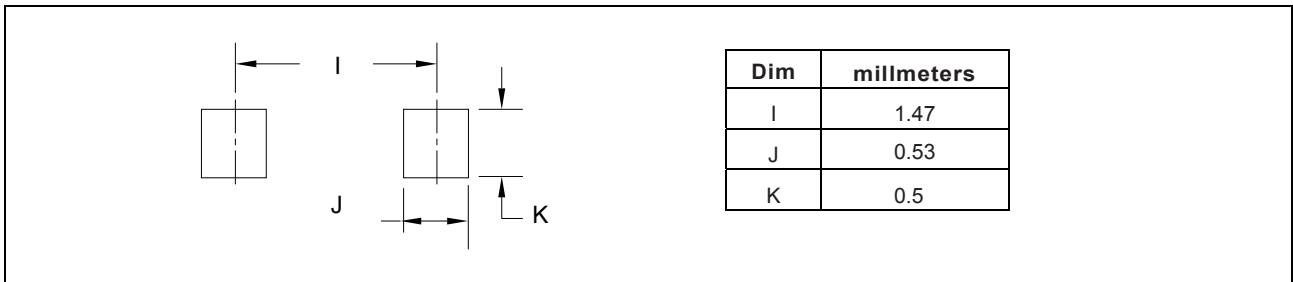
## Typical Characteristics ( $T_{amb} = 25\text{ }^\circ\text{C}$ unless otherwise specified)



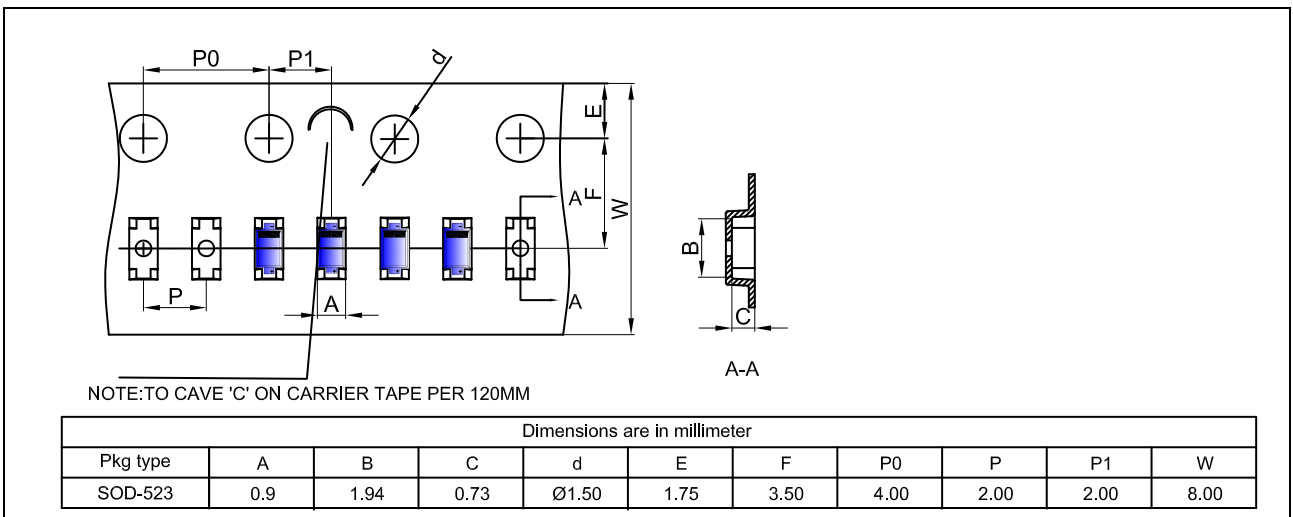
## Package Dimensions



## PAD Dimensions



## Package Information



## Marking



## Ordering information

Order code	Package	Net Weight	Packaging option	Base quantity	Packaging specification
1N4148WT	SOD-523	0.0014g	Tape and reel	8000pcs / Reel	EIA STD RS-481

## Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release
13-Dec.-2018	2.0	Update

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