# Surface Mount Fast Switching Diode









**SOD-323** 

#### Features:

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

### **Applications:**

· Surface Mount Fast Switching Diode

## **Maximum Ratings:**

Ratings at 25°C unless otherwise specified.

Characteristic	Symbol	Value	Unit
Non-Repetitive peak reverse voltage	VRM	100	V
Peak repetitive reverse voltage Working peak reverse voltage DC reverse voltage	Vrrm Vrwm Vr	75	V
RMS reverse voltage	VR(RMS)	53	V
Forward continuous current	Іғм	500	mA
Average rectified output current	lo	250	mA
Non-Repetitive peak forward surge current at t=1µs at t=1s	IFSM	4 2	А
Power dissipation	Pd	200	mW
Thermal resistance junction to ambient Air	Reja	625	°C/W
Operating and storage temperature range	Тј, Тѕтс	-65 to+150	°C

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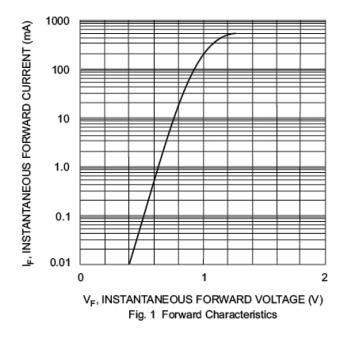
#### **Electrical Characteristics:**

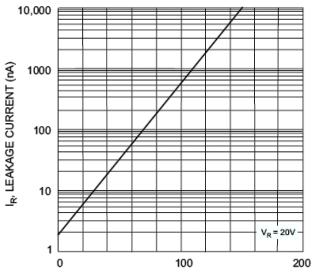
Ratings at 25°C unless otherwise specified

Characteristic	Symbol	Min.	Max.	Unit	Test Condition
Reverse breakdown voltage	V(BR)R	75	-	V	I <sub>R</sub> =1μA
Forward voltage	VF	0.62	0.715 0.855 1 1.25	V	IF=1mA IF=10mA IF=50mA IF=150mA
Reverse current	lr	-	2.5 25	μA nA	V <sub>R</sub> =75V V <sub>R</sub> =20V
Capacitance between terminals	Ст	-	4	pF	V <sub>R</sub> =0, f=1MHz
Reverse recovery time	trr	-	4	ns	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>II</sub> =0.1 × I <sub>R</sub> , R <sub>L</sub> =100Ω

## **Typical Characteristics:**

T<sub>A</sub> = 25°C unless otherwise specified





 $T_{j}$ , JUNCTION TEMPERATURE (°C) Fig. 2 Leakage Current vs Junction Temperature

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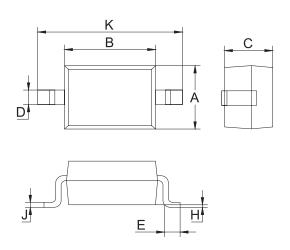


## Surface Mount Fast Switching Diode



#### **Package Outline:**

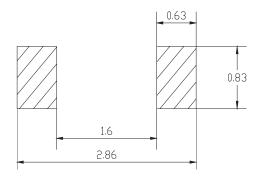
Plastic surface mounted package



SOD-323				
Dim.	Min.	Max.		
А	1.275	1.325		
В	1.675	1.725		
С	0.95 Typ.			
D	0.25	0.35		
E	0.27	0.37		
Н	0.02	0.1		
J	0.1 Typ.			
K	2.6	2.7		

Dimensions: Millimetres

### **Soldering Footprint:**



### **Package Information:**

Device	Package	Shipping
1N4448WS-7-F	SOD-323	3,000 / Tape & Reel

#### **Part Number Table**

Description	Part Number	
Surface Mount Fast Switching Diode	1N4448WS-7-F	

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