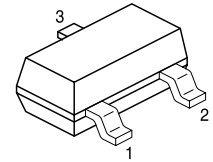


# Surface Mount Switching Diode



## Features:

- Fast switching speed
- High conductance
- For general purpose switching applications
- Surface mount package ideally suited for automatic insertion

## Pin Configuration:

1. Base
2. Emitter
3. Collector

## Applications:

- For general purpose switching applications

## Maximum Ratings

Parameter	Symbol	Value	Unit
Non Repetitive Peak Reverse Voltage	$V_{RM}$	85	V
Diode Reverse Voltage	$V_R$	75	
Forward Continuous Current	$I_F$	250	mA
Forward Surge Current ( $t=1\mu S$ )	$I_{ES}$	4.5	A
Power Dissipation	$P_D$	250	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-65 to +150	

# Surface Mount Switching Diode

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

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu\text{A}$	75			V
Reverse Voltage Leakage Current	$I_R$	$V_R=70\text{V}$ $V_R=75\text{V}$			1 50	$\mu\text{A}$
Forward Voltage	$V_F$	$I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$			715 855 1,000 1,250	mV
Diode Capacitance	$C_D$	$V_R=0\text{V}$ , $f=1\text{MHz}$			2	pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=10\text{mA}$ , $R_L=100\Omega$			6	nS

## Electrical Characteristics: $T_{amb}=25^\circ\text{C}$ unless otherwise specified

### Ratings & Characteristic Curves

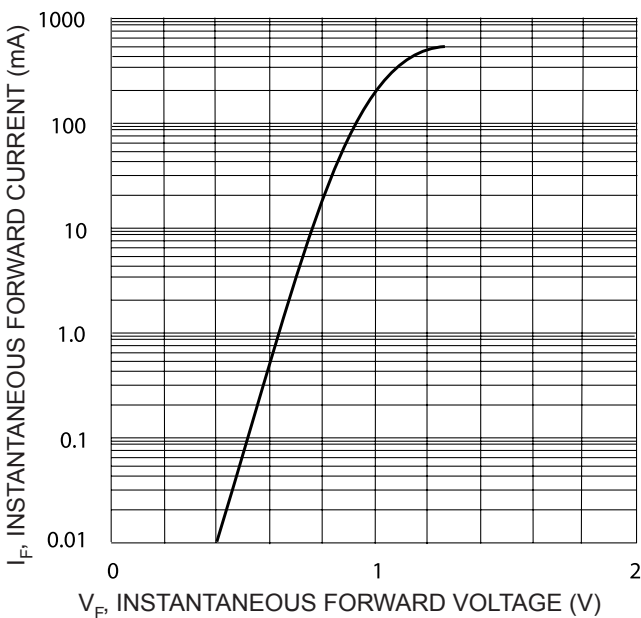


Fig. 1 Forward Characteristics

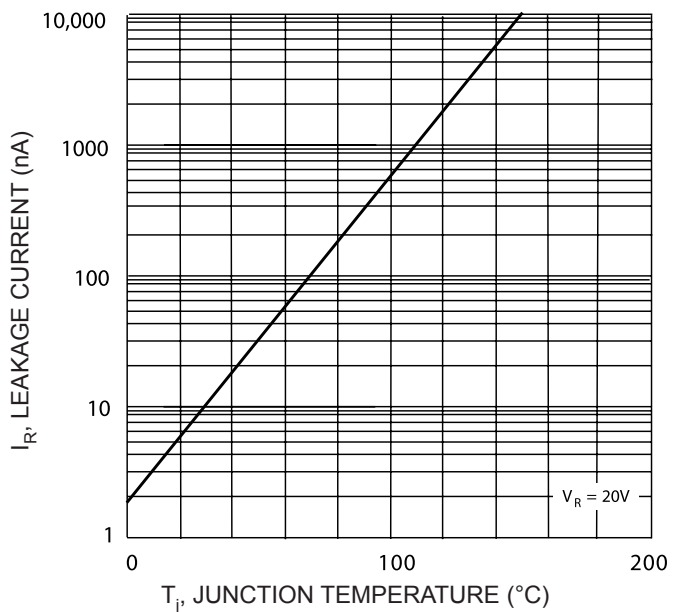
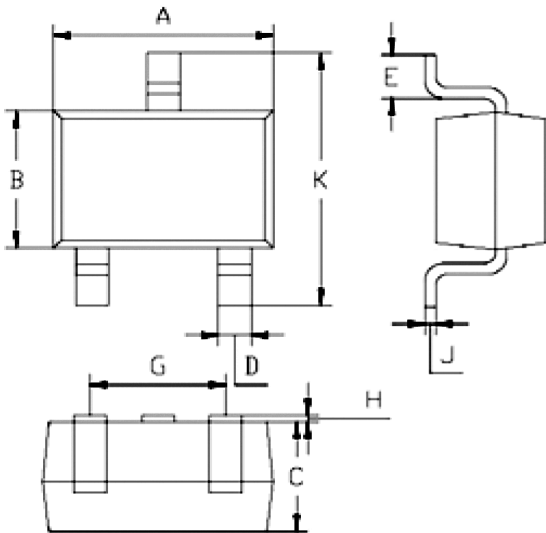


Fig. 2 Leakage Current vs Junction Temperature

# Surface Mount Switching Diode

## Package Outline

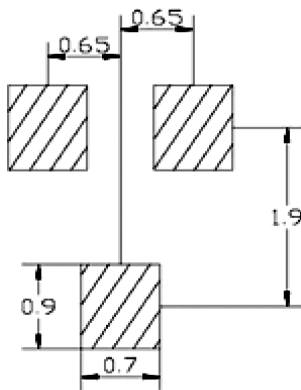
Plastic surface mounted package



Dimensions	Min.	Max.
A	1.8	2.2
B	1.15	1.35
C	1 Typical	
D	0.15	0.35
E	0.25	0.4
G	1.2	1.4
H	0.02	0.1
J	0.1 Typical	
K	2.1	2.3

Dimensions : Millimetres

## Soldering Footprint



Dimensions : Millimetres

## Part Number Table

Description	Part Number
Diode, Switching, 75V, SOT323	BAS16W

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