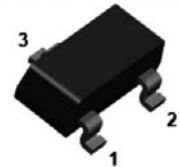


# Surface Mount Switching Diode



## Features:

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



SOT-23

## Applications:

High speed switching application

## Max. Rating @ TA = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Repetitive peak reverse voltage	$V_{RM}$	85	V
DC reverse Voltage	$V_R$	75	V
Forward continuous current	$I_F$	250	mA
Non-Repetitive peak forward surge current @t=1.0µs	$I_{FSM}$	4.5	A
Power dissipation $T_s = 54^\circ\text{C}$	$P_D$	370	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	375	$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-65 to +150	$^\circ\text{C}$

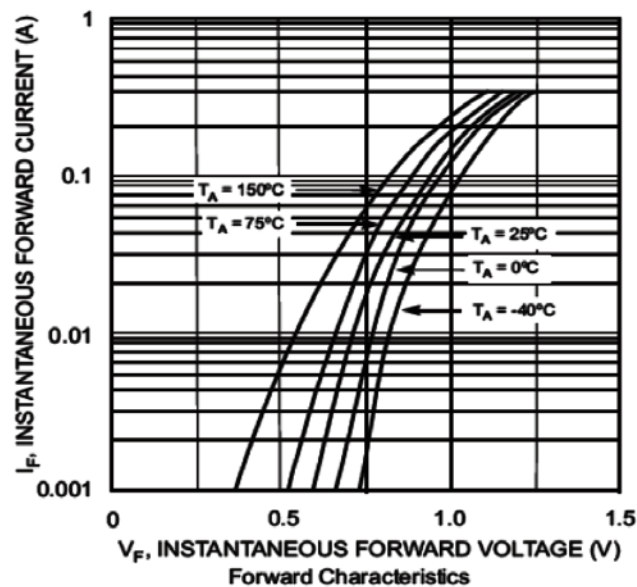
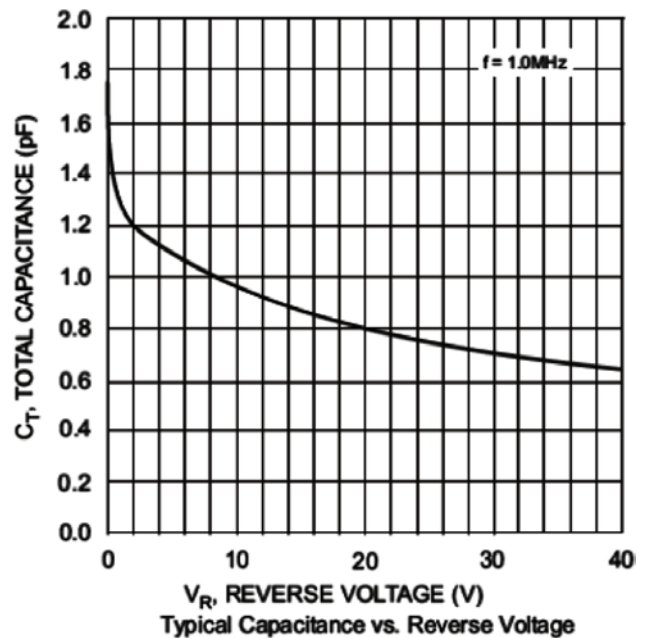
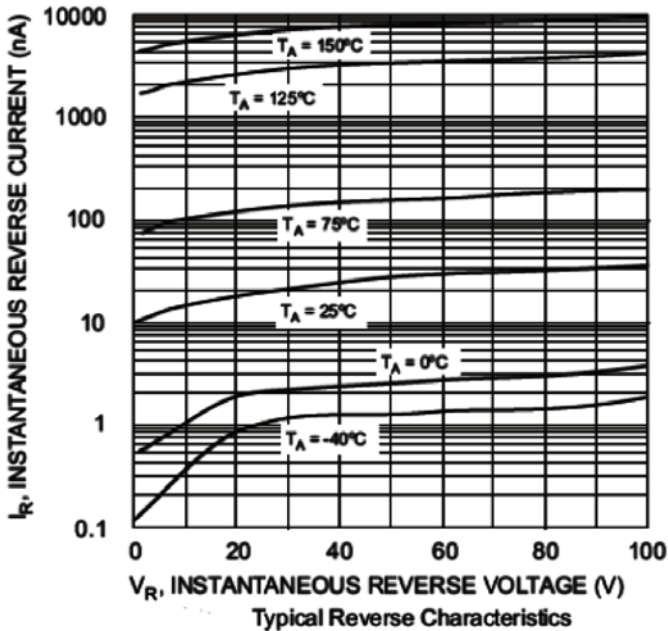
## Electrical Characteristics @ TA = 25°C unless otherwise specified

Characteristic	Symbol	Min.	Typ.	Max.	Unit	
Reverse breakdown voltage	$V_{(BR)R}$	75	-	-	V	$I_R = 100\mu\text{A}$
Forward voltage	$V_F$	-	-	0.715 0.855 1 1.25	V	$I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$
Reverse leakage current	$I_R$	-	-	1	$\mu\text{A}$	$V_R = 70\text{V}$
Junction capacitance	$C_j$	-	-	2	pF	$V_R = 0\text{V}, f = 1\text{MHz}$
Reverse recovery time	$t_{rr}$	-	-	6	ns	$I_F = I_R = 10\text{mA}, R_L = 100\Omega$

# Surface Mount Switching Diode



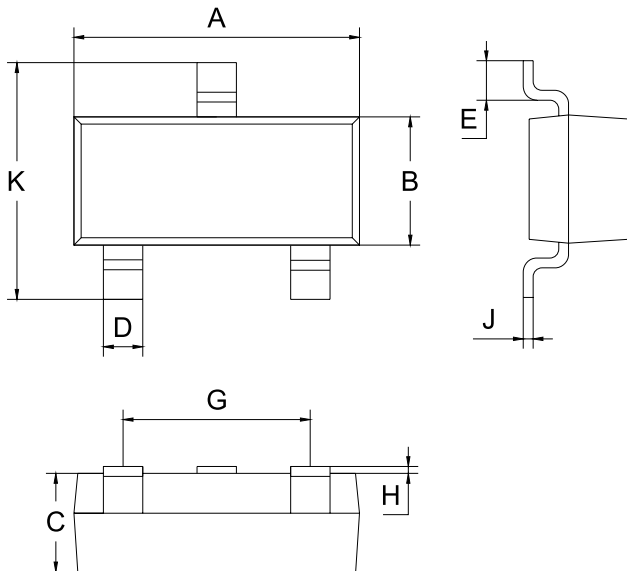
Typical Characteristics @  $T_A=25^\circ\text{C}$  unless otherwise specified



# Surface Mount Switching Diode

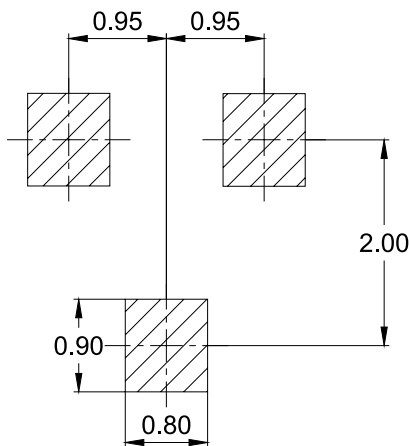


## Plastic surface mounted package



SOT-23		
Dim	Min	Max
A	2.7	3.1
B	1.1	1.5
C	1 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.8	2
H	0.02	0.1
J	0.1 Typical	
K	2.2	2.6
All Dimensions in mm		

## Soldering Footprint



Unit : mm

## Package Information

Device	Package	Shipping
BAS16-7-F	SOT-23	3,000 / Tape & Reel

## Part Number Table

Description	Part Number
Surface Mount Switching Diode	BAS16-7-F

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