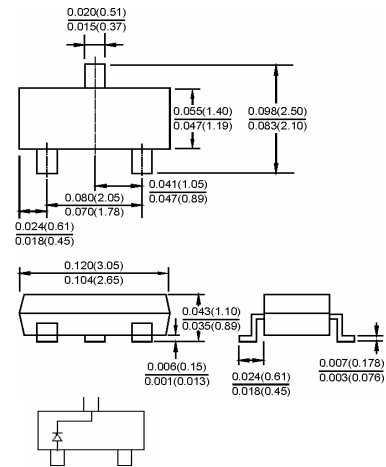


## SOT-23



Dimensions in inches and (millimeters)

## Features

- ✧ Low leakage current applications.
- ✧ Medium speed switching times.
- ✧ Surface mount package ideally suited for automatic Insertion.

## Applications

- ✧ High speed switching application.

## Ordering Information

Type No.	Marking	Package Code
BAS116	JV	SOT-23

## MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	85	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Reverse Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	60	V
Forward Continuous Current	$I_{FM}$	215	mA
Repetitive Peak Forward Current	$I_{FRM}$	500	mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	4.0	A
@t=1.0μs		1.0	
@t=1.0ms		0.5	
@t=1.0s			
Power Dissipation	$P_d$	250	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	°C/W
Operating Junction Temperature Range	$T_j$	150	°C
Storage Temperature Range	$T_{STG}$	-65 to +150	°C

## ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	85	-	-	V	$I_R = 100\mu A$
Forward Voltage	$V_{FM}$	-	-	0.9 1.0 1.1 1.25	V	$I_F = 1mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 150mA$
Reverse Leakage Current	$I_R$	-	-	5.0	nA	$V_R = 75V$
Junction Capacitance	$C_j$	-	2	-	pF	$V_R = 0V, f = 1.0MHz$
Reverse Recovery Time	$t_{rr}$	-	-	3	ns	$I_F = I_R = 10mA, I_{rr} = 0.1 * I_R$

## TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

