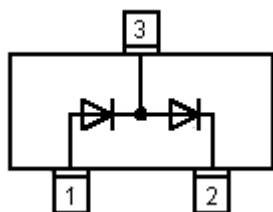
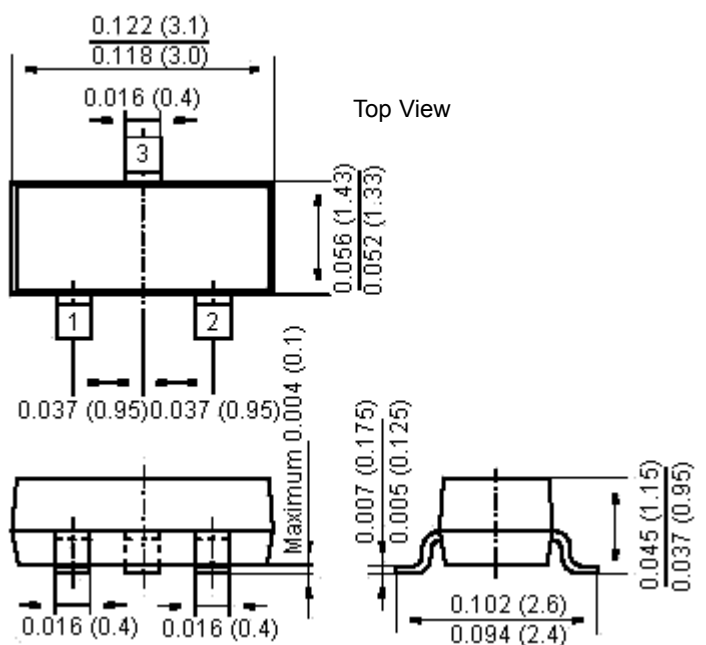




### Features:

- These diodes feature very low turn-on voltage and fast switching.
- These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic dis-charges.

### SOT-23



**BAS70-04**  
Marking: 74

### Mechanical Data

Case : SOT-23 plastic package.  
Weight : Approximately 0.008g.

## Maximum Ratings and Electrical Characteristics for One Diode

Ratings at 25°C Ambient Temperature Unless Otherwise Specified.

Type Number	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	70	V
Forward Continuous Current at $T_{amb} = 25^{\circ}\text{C}$	$I_F$	200 <sup>1)</sup>	mA
Surge Forward Current at $t_p < 1\text{s}$ , $T_{amb} = 25^{\circ}\text{C}$	$I_{FSM}$	600 <sup>1)</sup>	
Power Dissipation <sup>1)</sup> at $T_{amb} = 25^{\circ}\text{C}$	$P_{tot}$	200 <sup>1)</sup>	mW
Junction Temperature	$T_j$	200	$^{\circ}\text{C}$
Storage Temperature Range	$T_s$	-55 to +150	

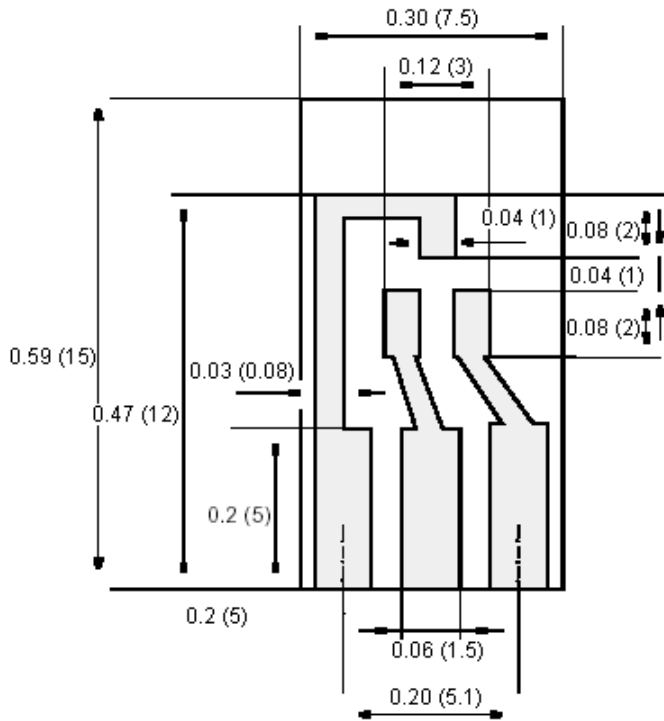
<sup>1)</sup> Device on fiberglass substrate, see layout

## Electrical Characteristics

Ratings for one diode at 25°C Ambient Temperature Unless Otherwise Specified.

Type Number	Symbol	Minimum	Typical	Maximum	Unit
Reverse Breakdown Voltage Tested with 10 $\mu\text{A}$ Pulses	$V_{(BR)R}$	70	-	-	V
Leakage Current Pulse Test $t_p < 300\mu\text{s}$ at $V_R = 50\text{V}$	$I_R$	-	20	100	nA
Forward Voltage Pulse Test $t_p < 300\mu\text{s}$ at $I_F = 1\text{mA}$ at $I_F = 15\text{mA}$	$V_F$ $V_F$	- -	- -	410 1000	mV mV
Capacitance at $V_R = 0\text{V}$ , $f = 1\text{MHz}$	$C_{tot}$	-	1.5	2	pF
Reverse Recovery Time from $I_F = 10\text{mA}$ through $I_R = 10\text{mA}$ to $I_R = 1\text{mA}$	$t_{rr}$	-	-	5	ns
Thermal Resistance Junction to Ambient Air	$R_{thJA}$	-	-	430 <sup>1)</sup>	K/W

<sup>1)</sup> Device on fiberglass substrate, see layout



### Layout for $R_{thJA}$ test

Thickness : Fiberglass 0.059 in (1.5mm)  
 Copper leads 0.012 in (0.3mm)

### Part Number Table

Description	Part Number
Diode, Schottky, SOT-23	BAS70-04

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