

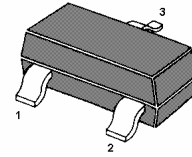
# BAS70 / -04 / -05 / -06

## SURFACE MOUNT SCHOTTKY BARRIER DIODE

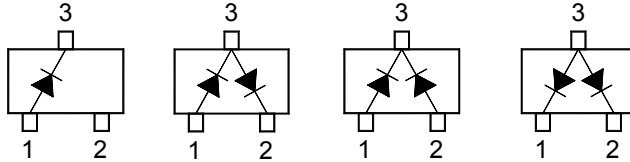
SOT-23

### Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard ring for Transient and ESD Protection.



BAS70    BAS70-04    BAS70-05    BAS70-06



SOT-23 Plastic Package

BAS70    Marking Code: **73**  
 BAS70-04 Marking Code: **74**  
 BAS70-05 Marking Code: **75**  
 BAS70-06 Marking Code: **76**

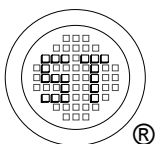
### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak repetitive reverse voltage	$V_{RRM}$	70	V
Working peak reverse voltage	$V_{RWM}$		
DC blocking voltage	$V_R$		
Forward continuous current	$I_F$	200 <sup>1)</sup>	mA
Non-repetitive peak forward surge current @ $t_p < 1\text{s}$	$I_{FSM}$	600 <sup>1)</sup>	mA
Power dissipation	$P_{tot}$	200 <sup>1)</sup>	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	430 <sup>1)</sup>	K/W
Operating junction temperature range	$T_J$	150	$^\circ\text{C}$
Storage temperature range	$T_S$	-55 to +150	$^\circ\text{C}$

<sup>1)</sup> Device on fiberglass substrate

### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward voltage at $I_F = 1\text{mA}$	$V_F$	-	410	mV
at $I_F = 15\text{mA}$	$V_F$	-	1000	mV
Leakage Current at $V_R = 50\text{V}$	$I_R$	-	100	nA
Reverse breakdown voltage Tested with $10\mu\text{A}$	$V_{(BR)R}$	70	-	V
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
Capacitance at $V_R = 0\text{V}$ , $f = 1\text{MHz}$	$C_{tot}$	-	2	pF



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ISO/TS 16949 : 2002  
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