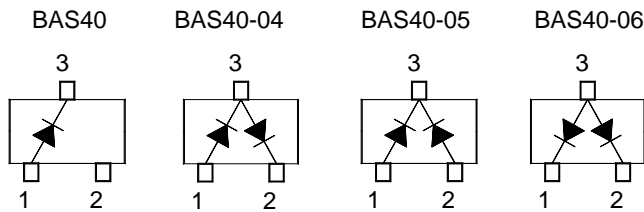
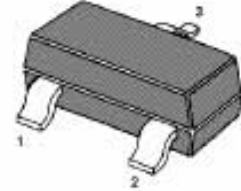


## SURFACE MOUNT SCHOTTKY BARRIER DIODE

### Features

- Low forward voltage
- Fast switching



SOT-23 Plastic Package

BAS40 Marking Code: **43**  
 BAS40-04 Marking Code: **44**  
 BAS40-05 Marking Code: **45**  
 BAS40-06 Marking Code: **46**

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	40	V
DC Blocking Voltage	$V_R$	40	V
Forward Continuous Current	$I_F$	200	mA
Peak Forward Surge Current (at $t_p < 1$ s)	$I_{FSM}$	600	mA
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_S$	- 55 to + 150	$^\circ\text{C}$

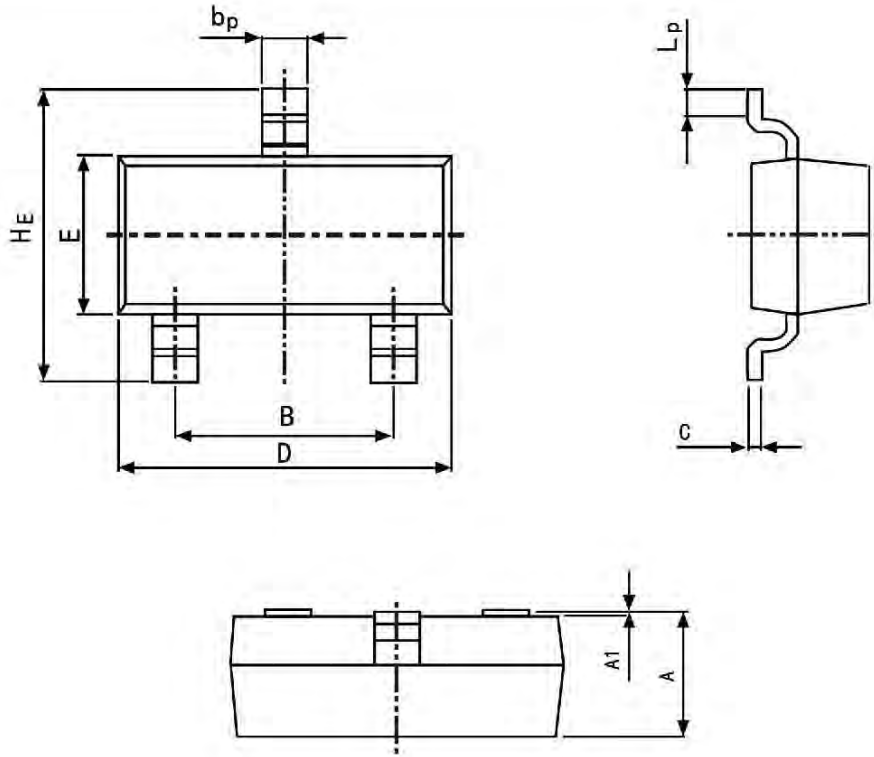
### Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1$ mA at $I_F = 40$ mA	$V_F$	-	380	mV
	$V_F$	-	1000	mV
Reverse Current at $V_R = 30$ V	$I_R$	-	200	nA
Reverse Breakdown Voltage at $I_R = 10$ $\mu\text{A}$	$V_{(BR)R}$	40	-	V
Reverse Recovery Time from $I_F = 10$ mA through $I_R = 10$ mA to $I_R = 1$ mA	$t_{rr}$	-	5	ns
Total Capacitance at $V_R = 0$ V, $f = 1$ MHz	$C_T$	-	5	pF

**PACKAGE OUTLINE**

Plastic surface mounted package; 3 leads

SOT-23



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.40
B	1.78	2.04
$b_p$	0.35	0.50
C	0.08	0.19
D	2.70	3.10
E	1.20	1.65
HE	2.20	3.00
$A_1$	0.100	0.013
$L_p$	0.20	0.50