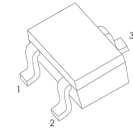


### SURFACE MOUNT SCHOTTKY BARRIER DIODE

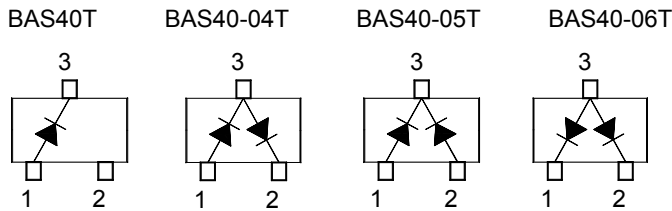
#### Features

- Low forward voltage
- Fast switching

#### SOT-523



1. BASE
2. EMITTER
3. COLLECTOR



BAS40T Marking Code: **43**  
 BAS40-04T Marking Code: **44**  
 BAS40-05T Marking Code: **45**  
 BAS40-06T Marking Code: **46**

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

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 $t_p < 1\text{ s}$ )	$I_{FSM}$	600	mA
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_S$	- 55 to + 150	$^\circ\text{C}$

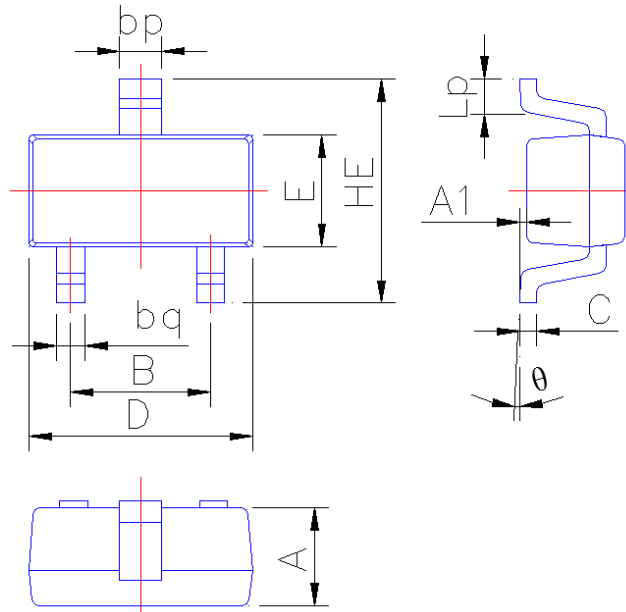
#### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

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

## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



Symbol	Dimension in Millimeters	
	Min	Max
A	0.60	0.80
A1	0.010	0.100
B	0.95	1.05
bp	0.26	0.40
bq	0.16	0.30
C	0.09	0.15
D	1.50	1.70
E	0.70	0.85
HE	1.45	1.75
Lp	0.16	0.36
θ	0°	5°