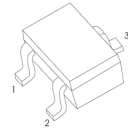


SURFACE MOUNT SCHOTTKY BARRIER DIODE

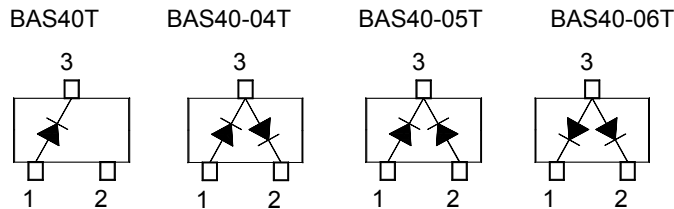
Features

- 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 ($T_a = 25^\circ\text{C}$)

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	$^\circ\text{C}$

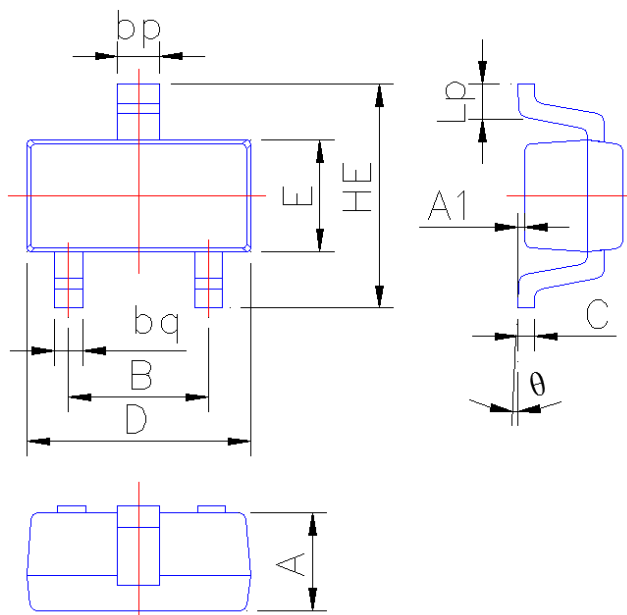
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1$ mA	V_F	-	380	mV
at $I_F = 40$ mA	V_F	-	1000	mV
Reverse Current at $V_R = 30$ V	I_R	-	200	nA
Reverse Breakdown Voltage at $I_R = 10$ μA	$V_{(BR)R}$	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; 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°