

0.2A, 40V Surface Mount Schottky Barrier Diode

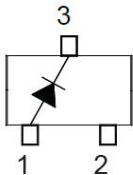
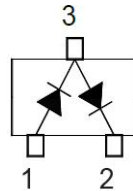
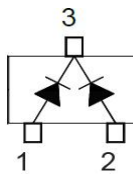
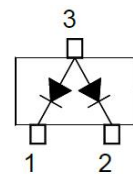
1. Features

- Low forward voltage
- Fast switching

2. Mechanical Data

- SOT-23 Plastic Package
- Mounting Position: Any

3. Device Information

Part Number	Mark Code	Circuit
BAS40	43	
BAS40-04	44	
BAS40-05	45	
BAS40-06	46	

4. Specification

Absolute Maximum Rating & Thermal Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

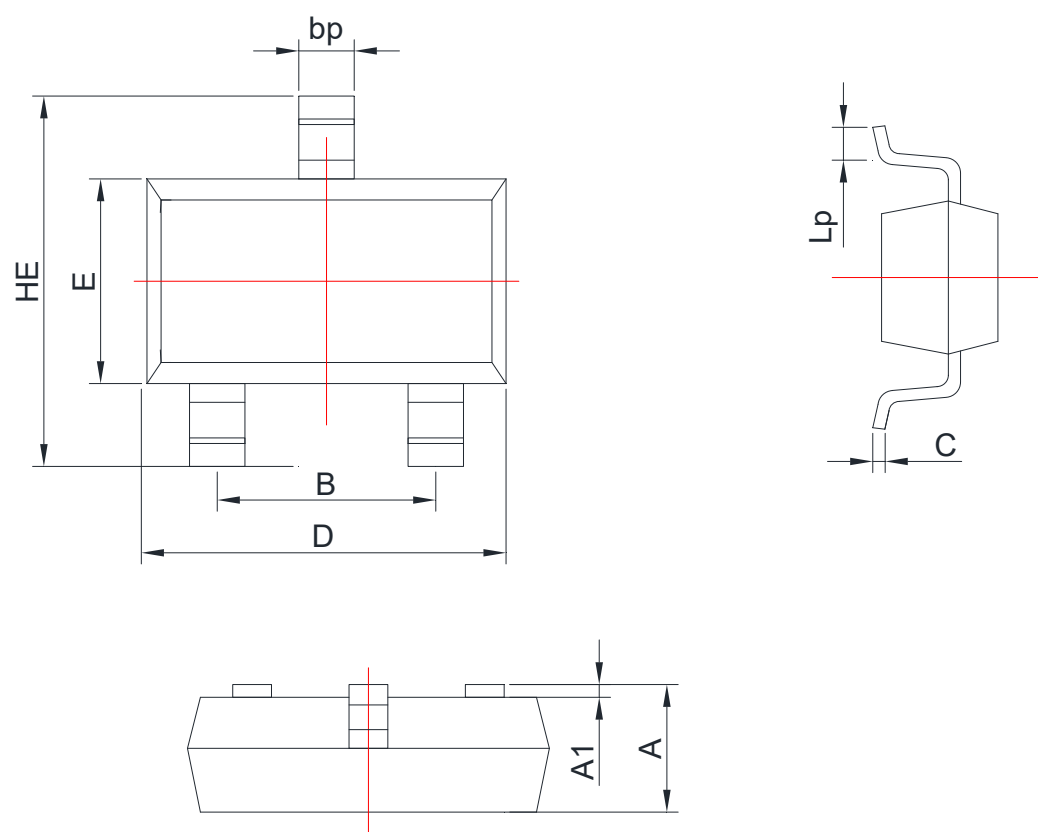
Valid provided that electrodes are kept at ambient temperature

Parameter	Symbol	Limit	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
DC Blocking Voltage	V_R	40	V
Forward Continuous Current	I_F	0.2	A
Peak Forward Surge Current (at $t_p < 1$ s)	I_{FSM}	0.6	A
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-50~+150	°C

Electrical Characteristics (At $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse current	I_R	$V_R = 25\text{V}$			500	nA
Forward Voltage	V_F	$I_F = 1\text{mA}$			0.38	V
		$I_F = 40\text{mA}$			1	
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R = 10\mu\text{A}$	40			V
Reverse Recovery Time	t_{rr}	$I_F = 10\text{mA}$ $I_R = 10\text{mA}$ to $I_R = 1\text{mA}$			5	ns
Total Capacitance	C_T	$V_R = 0\text{V}$, $f = 1\text{MHz}$			5	pF

5. Dimension and Patterns (SOT-23)



Unit	A	b _p	B	C	D	E	H _E	A ₁	L _P
mm	1.40	0.50	2.04	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	0.35	1.78	0.08	2.70	1.20	2.20	0.013	0.20

Notice

1. All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise. The right to explain is owned by CCX electronics company.
2. Confirm that operation temperature is within the specified range described in the product specification.

Avoid applying power exceeding normal rated power; exceeding the power rating under steady-state loading condition may negatively affect product performance and reliability.
3. CCX shall not be in any way responsible or liable for failure induced under deviant condition from what is defined in this document.