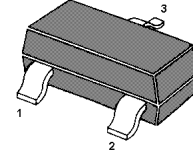
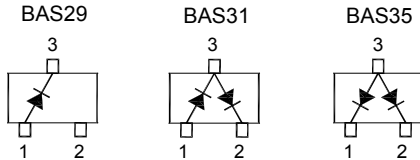


Silicon Epitaxial Planar Switching Diodes



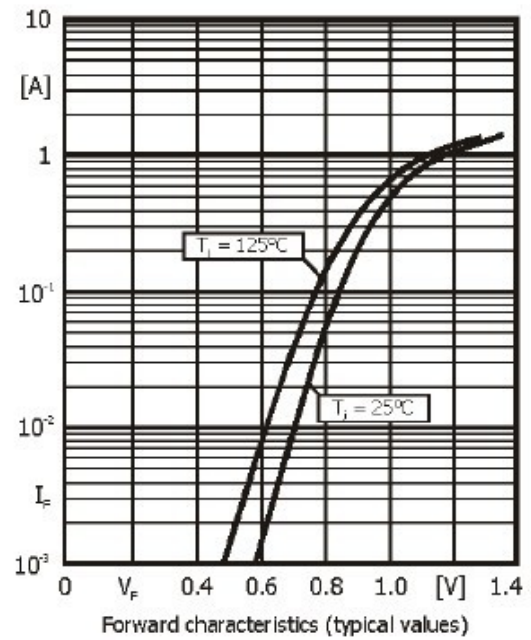
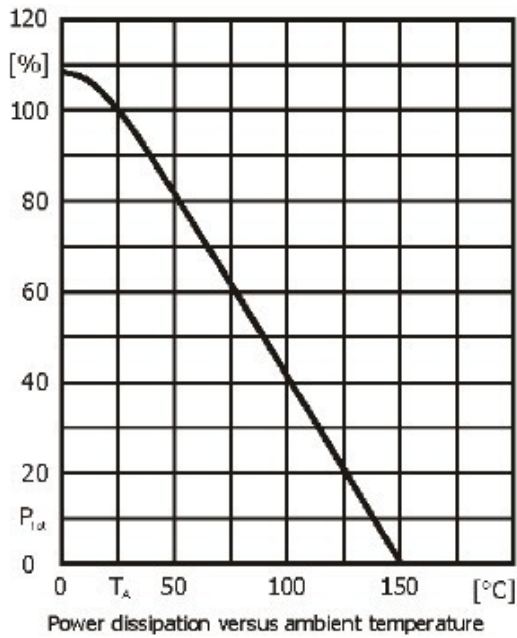
BAS29 Marking Code: **L20**
 BAS31 Marking Code: **L21**
 BAS35 Marking Code: **L22**
 SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	120	V
Maximum Average Forward Current	$I_{F(AV)}$	200	mA
Repetitive Peak Forward Current	I_{FRM}	600	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	2 1	A
	$t = 1\ \mu\text{s}$ $t = 1\ \text{s}$		
Power Dissipation	P_{tot}	350	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

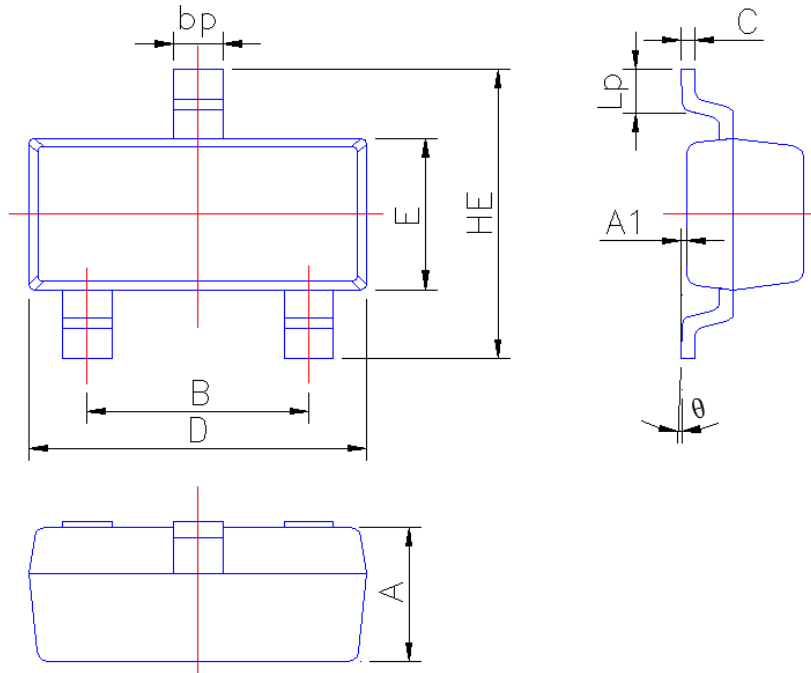
Parameter	Symbol	Min.	Max.	Unit
Forward Voltage				
at $I_F = 10\ \text{mA}$	V_F	-	750	mV
at $I_F = 50\ \text{mA}$	V_F	-	840	mV
at $I_F = 100\ \text{mA}$	V_F	-	900	mV
at $I_F = 200\ \text{mA}$	V_F	-	1	V
at $I_F = 400\ \text{mA}$	V_F	-	1.25	V
Reverse Current				
at $V_R = 90\ \text{V}$	I_R	-	100	nA
at $V_R = 90\ \text{V}, T_j = 150\text{ }^\circ\text{C}$	I_R	-	100	μA
Reverse Breakdown Voltage				
at $I_R = 1\ \text{mA}$	$V_{(BR)R}$	120	-	V
Total Capacitance				
at $V_R = 0\ \text{V}, f = 1\ \text{MHz}$	C_T	-	35	pF
Reverse Recovery Time				
at $I_F = I_R = 10\ \text{mA}, I_{rr} = 1\ \text{mA}, R_L = 100\ \Omega$	t_{rr}	-	50	ns



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.10
A1	0.013	0.100
B	1.80	2.00
bp	0.35	0.50
C	0.09	0.150
D	2.80	3.00
E	1.20	1.40
HE	2.20	2.80
Lp	0.20	0.50
θ	0°	5°