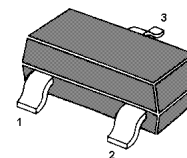
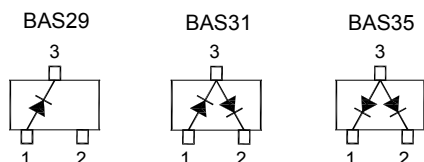


Silicon Epitaxial Planar Switching Diodes



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
	$t = 1\text{ }\mu\text{s}$ $t = 1\text{ s}$		
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	$V_{(BR)R}$	120	-	V
at $I_R = 1\text{ mA}$				
Total Capacitance	C_T	-	35	pF
at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$				
Reverse Recovery Time	t_{rr}	-	50	ns
at $I_F = I_R = 10\text{ mA}$, $I_{rr} = 1\text{ mA}$, $R_L = 100\text{ }\Omega$				

