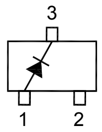
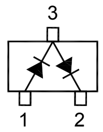
BAS29, BAS31, BAS35

Silicon Epitaxial Planar Switching Diodes

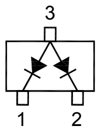
BAS29

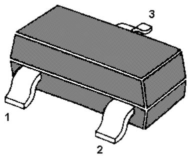


BAS31



BAS35





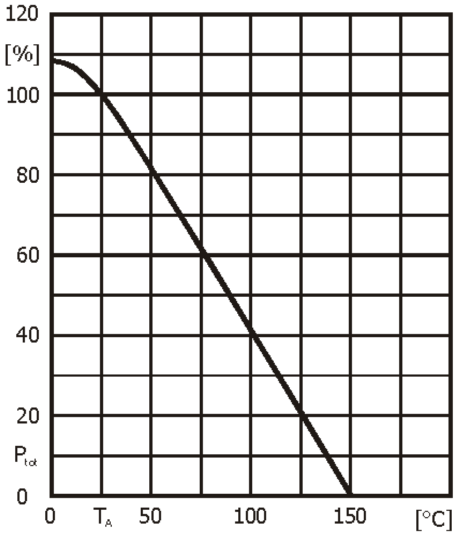
BAS29 Marking Code: **L20**
BAS31 Marking Code: **L21**
BAS35 Marking Code: **L22**
SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

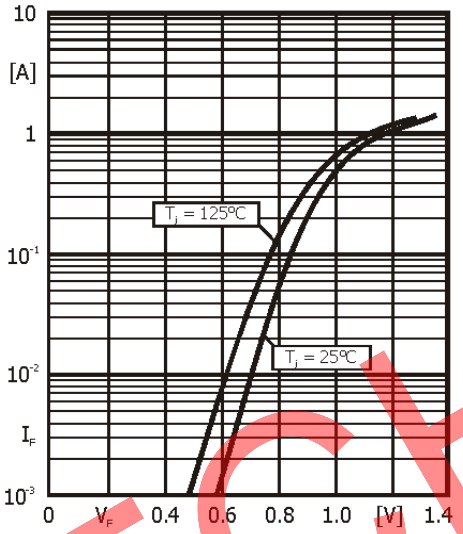
Parameter		Symbol	Value	Unit
Repetitive Peak Reverse Voltage		V_{RRM}	120	V
Maximum Average Forward Current		$I_{F(AV)}$	200	mA
Repetitive Peak Forward Current		I_{FRM}	600	mA
Non-Repetitive Peak Forward Surge Current	t = 1 µs t = 1 s	I_{FSM}	2 1	A
Power Dissipation		P_{tot}	350	mW
Junction Temperature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

Characteristics at T_a = 25 °C

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



Power dissipation versus ambient temperature



Forward characteristics (typical values)