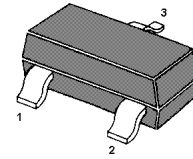
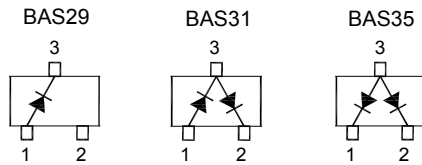


Silicon Epitaxial Planar Switching Diodes



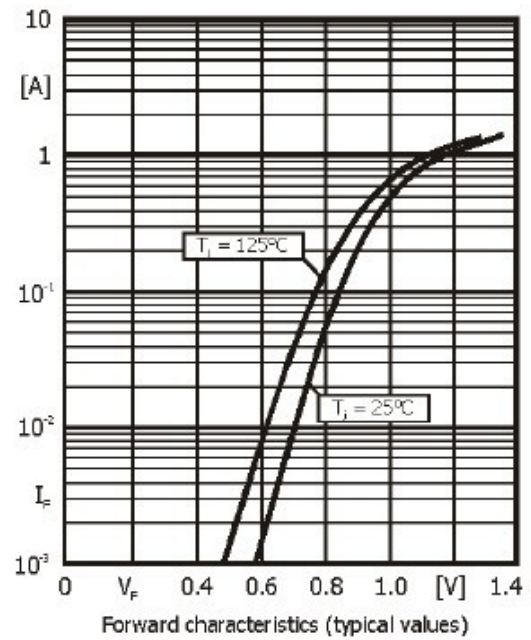
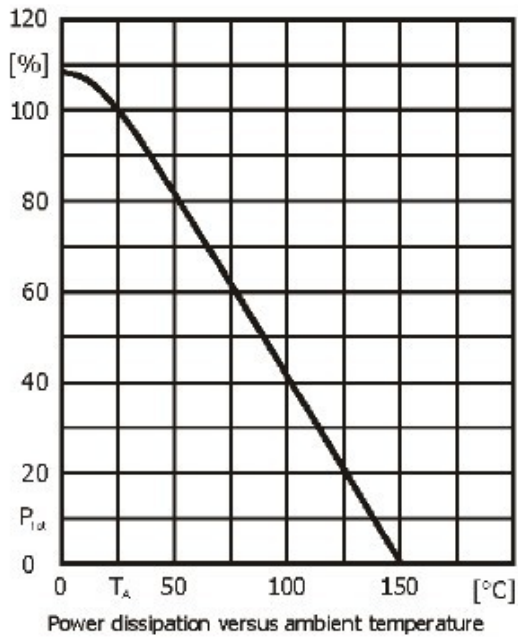
BAS29 Marking Code: **L20**
 BAS31 Marking Code: **L21**
 BAS35 Marking Code: **L22**
 SOT-23 Plastic Package

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

