

# BAS32L

## Silicon Epitaxial Planar Switching Diode

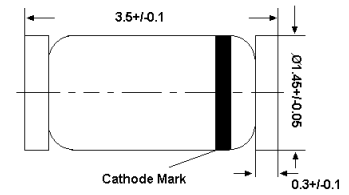
### Features

- Small hermetically-sealed glass SMD package
- High switching speed

### Application

- High-speed switching
- Fast logic applications

LL-34



Glass case MiniMELF  
Dimensions in mm

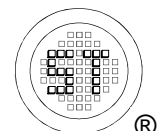
### Absolute Maximum Ratings ( $T_a = 25\text{ °C}$ )

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Continuous Reverse Voltage	$V_R$	75	V
Continuous Forward Current	$I_F$	200	mA
Repetitive Peak Forward Current	$I_{FRM}$	450	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM}$	0.5 1 4	A
		at $t = 1\text{ s}$ at $t = 1\text{ ms}$ at $t = 1\text{ }\mu\text{s}$	
Power dissipation	$P_{tot}$	500	mW
Junction temperature	$T_j$	175	°C
Storage temperature range	$T_{stg}$	- 65 to + 175	°C

### Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction Ambient <sup>1)</sup>	$R_{\theta JA}$	300	°C/W

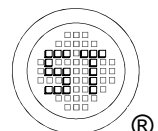
<sup>1)</sup> Valid provided that electrodes are kept at ambient temperature.



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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5\text{ mA}$	$V_F$	620	750	mV
at $I_F = 100\text{ mA}$	$V_F$	-	1000	mV
at $I_F = 100\text{ mA}, T_j = 100\text{ }^\circ\text{C}$	$V_F$	-	930	mV
Reverse Current at $V_R = 20\text{ V}$	$I_R$	-	25	nA
at $V_R = 75\text{ V}$	$I_R$	-	5	$\mu\text{A}$
at $V_R = 20\text{ V}, T_j = 150\text{ }^\circ\text{C}$	$I_R$	-	50	$\mu\text{A}$
at $V_R = 75\text{ V}, T_j = 150\text{ }^\circ\text{C}$	$I_R$	-	100	$\mu\text{A}$
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	100	-	V
Diode Capacitance at $V_R = 0, f = 1\text{ MHz}$	$C_d$	-	2	pF
Reverse Recovery Time at $I_F = 10\text{ mA}, I_{rr} = 0.1 \times I_R, V_R = 6\text{ V}, R_L = 100\text{ }\Omega$	$t_{rr}$	-	4	ns



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## Electrical Characteristics Curves

Fig 1. Forward Characteristics

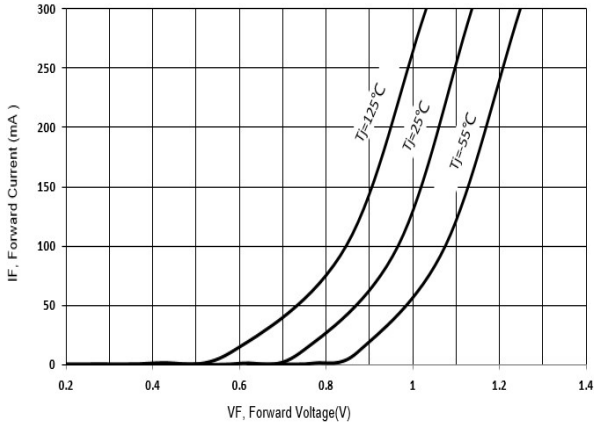


Fig 2. Reverse Characteristics

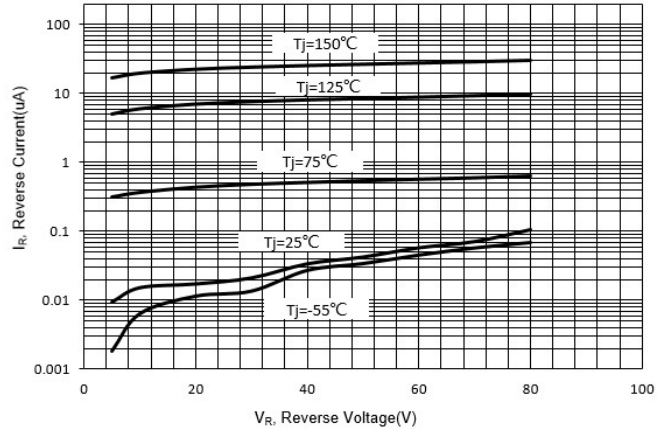


Fig 3. Junction Capacitance

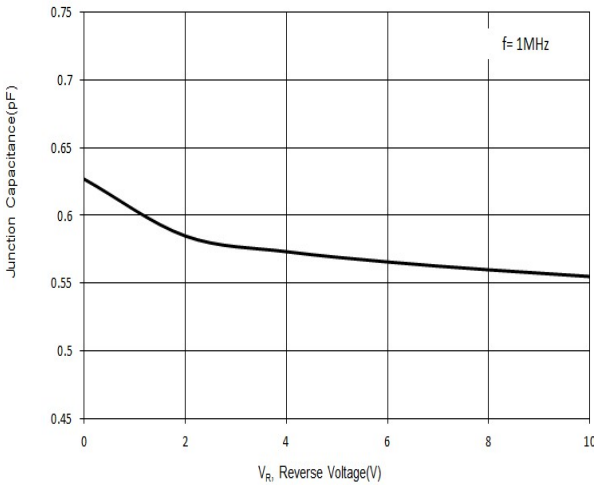


Fig 4. Power Derating Curves

