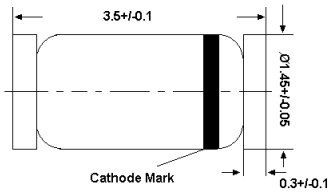
BAS32LPF

Silicon Epitaxial Planar Switching Diode

Features

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

LL-34



Glass case MiniMELF
Dimensions in mm

Application

- High-speed switching
- Fast logic applications

Absolute Maximum Ratings (T_a = 25 °C)

Parameter		Symbol	Value	Unit
Repetitive Peak Reverse Voltage		V_{RRM}	75	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	at t = 1 s at t = 1 ms at t = 1 µs	I_{FSM}	0.5 1 4	A
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 [1)]	$R_{\theta JA}$	300	°C/W

[1)] Valid provided that electrodes are kept at ambient temperature.

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Characteristics at T_a = 25 °C

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

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Electrical Characteristics Curves

Fig 1. Forward Characteritics

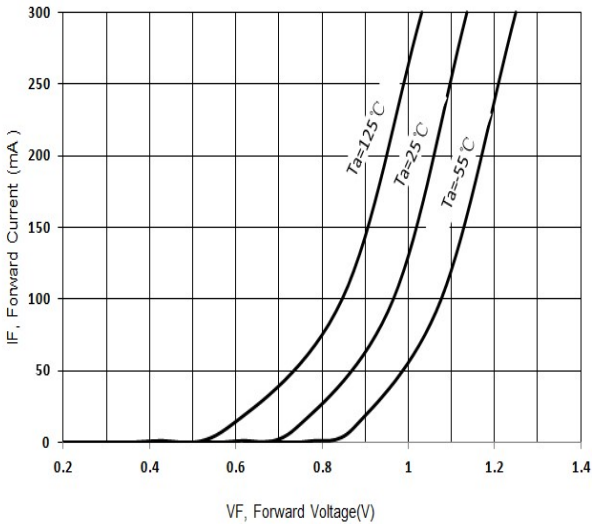

Fig 2. Reverse Characteritics

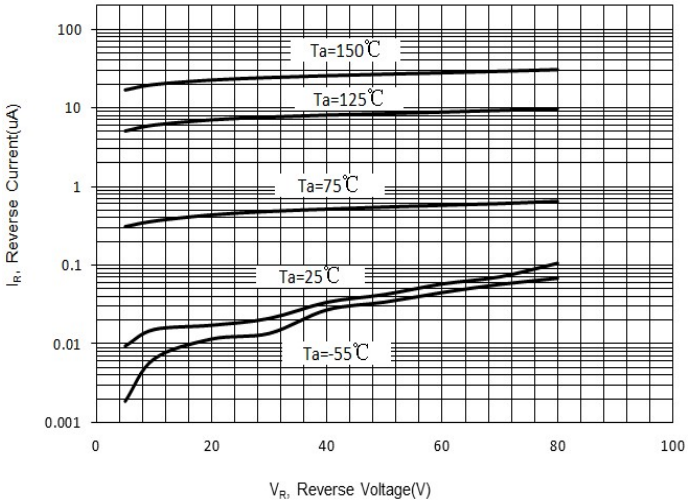

Fig 3. Junction Capacitance

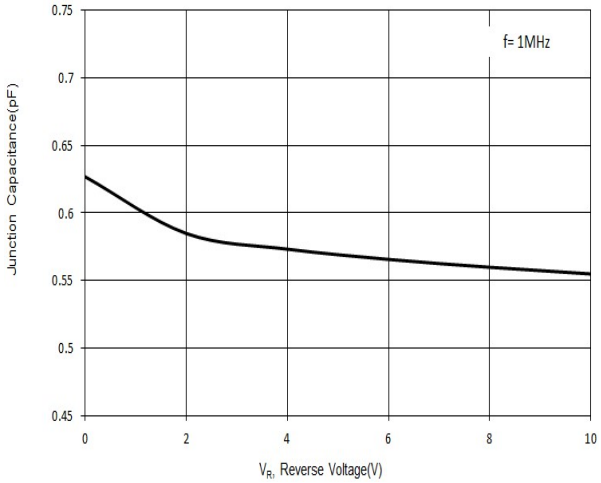

Fig 4. Power Derating Curves