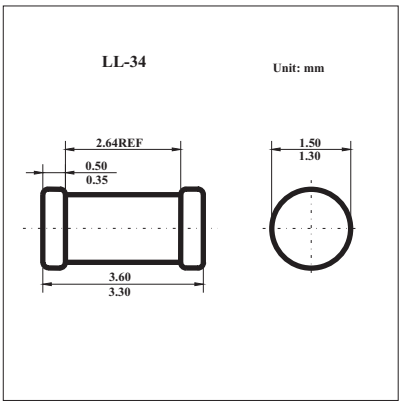
High-speed diode
BAS32L



Features

- Small hermetically sealed glass SMD package
- High switching speed: max. 4 ns
- Continuous reverse voltage:max. 75 V
- Repetitive peak reverse voltage:max. 75 V
- Repetitive peak forward current:max. 450 mA.

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
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 current t = 1 μs t = 1 ms t = 1 s	I_{FSM}	4 1 0.5	A
total power dissipation	P_D	500	mW
thermal resistance from junction to tie-point	$R_{th\ j\text{-}tp}$	300	K/W
thermal resistance from junction to ambient	$R_{th\ j\text{-}a}$	350	K/W
junction temperature	T_j	200	℃
storage temperature	T_{stg}	-65 to +200	℃

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min.	Max	Unit
forward voltage	V_F	I_F = 5 mA I_F =100 mA I_F =100 mA;T_J=100℃	620	750 1000 930	mV
reverse current	I_R	V_R = 20 V V_R = 75 V V_R = 20 V; T_j = 150℃ V_R = 75 V; T_j = 150℃		25 5 50 100	nA μA μA μA
reverse breakdown voltage	$V_{(BR)R}$	I_R = 100 μA	100		V
diode capacitance	C_d	f = 1 MHz; V_R =0V		2	pF
reverse recovery time	t_{rr}	when switched from I_F = 10 mA to I_R = 10 mA; R_L = 100Ω ;measured at I_R = 1 mA		4	ns
forward recovery voltage	V_{fr}	when switched from I_F = 50 mA;t_r = 20 ns;		2.5	V

* Pulsed test: t_p = 300 μs; δ = 0.02.