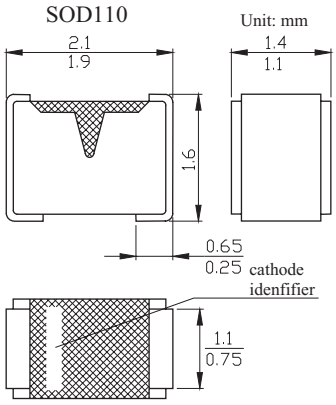
HIGH-SPEED SWITCHING DIODE

BAS216



Features

- Small ceramic SMD package
- High switching speed:max. 4 ns
- Continuous reverse voltage:max.75V
- Repetitive peak reverse voltage:max.85V
- Repetitive peak forward current:max. 500 mA.

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Conditions	Min	Max	Unit
Continuous peak reverse voltage	V_{RRM}			85	V
Continuous reverse voltage	V_R			75	V
Continuous forward current	I_F	Note 1		250	mA
Repetitive peak forward current	I_{FSM}			500	mA
Non-repetitive peak forwrad current	I_{FSM}	square wave; T_j = 25 ℃ prior to surge; t = 1 μA t = 1 ms t = 1 s		 4 1 0.5	A
Total power dissipation	P_{tot}	Tamb = 25 ℃;note 1		400	mW
Storage temperature	T_{stg}		-65	+150	℃
Junction temperature	T_j			150	℃

Note

1. Device mounted on an FR4 printed-circuit board.

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Conditions	Min	Max	Unit
forward voltage	V_F	I_F = 1 mA		715	mV
		I_F = 10 mA		855	mV
		I_F = 50 mA		1	V
		I_F = 150 mA		1.25	V
capacitance reverse current	I_R	V_R = 25 V		30	nA
		V_R = 75 V		1	μA
		V_R = 25 V, T_j = 150 ℃		30	μA
		V_R = 25 V, T_j = 150 ℃		50	μA
diods capacitance	C_d	V_R = 1 V, f = 1 MHz		1.5	pF
reverse recovery time	t_{rr}	when switched from I_F = 10 mA to I_R = 10 mA; R_L = 100 Ω measured at I_R = 1 mA		4	ns
forward recovery voltage	V_{rr}	when switched from I_F = 10 mA;t_r = 20 ns		1.75	V

Note

1.Pulsed test: tp = 300 μs, δ = 0.02.

■ Marking

Marking	A6