

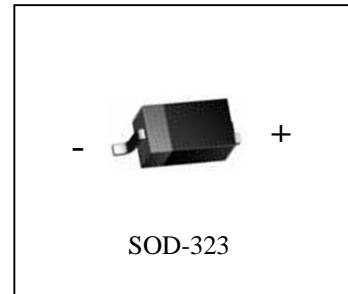
## High-Speed Diode

### KAS316(BAS316)

**BAS316**

#### ■ Features

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



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
repetitive peak reverse voltage	V <sub>RRM</sub>	85	V
continuous reverse voltage	V <sub>R</sub>	75	V
continuous forward current	I <sub>F</sub>	250	mA
repetitive peak forward current	I <sub>FRM</sub>	500	mA
non-repetitive peak forward current t = 1 ms	I <sub>FSM</sub>	4	A
t = 1 μ s		1	A
t = 1 s		0.5	A
power dissipation	P <sub>D</sub>	400	mW
junction temperature	T <sub>j</sub>	150	°C
storage temperature	T <sub>stg</sub>	-65 to +150	°C

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 1 mA			715	mV
		I <sub>F</sub> = 10 mA			855	mV
		I <sub>F</sub> = 50 mA			1	v
		I <sub>F</sub> = 150 mA			1.25	v
Leakage current	I <sub>R</sub>	V <sub>R</sub> = 25 V			30	nA
		V <sub>R</sub> = 75 V			1	μ A
		V <sub>R</sub> = 25 V; T <sub>j</sub> = 150 °C			30	μ A
		V <sub>R</sub> = 75 V; T <sub>j</sub> = 150 °C			50	μ A
Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> = 0, f = 1.0MHz			1.5	pF
reverse recovery time	trr	when switched from I <sub>F</sub> = 10 mA to I <sub>R</sub> = 10mA; R <sub>L</sub> = 100 Ω; measured at I <sub>R</sub> = 1 mA			4	ns

#### ■ Marking

Marking	A6
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