

## High-Speed Double Diode

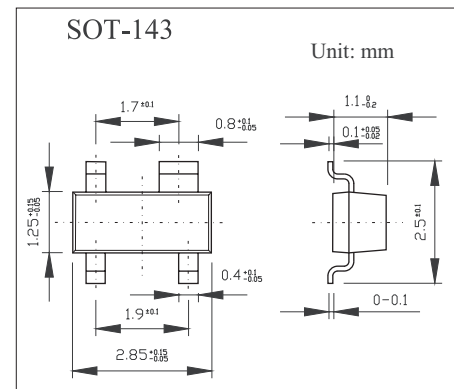
## BAS28

## ■ Features

- 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  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Test Condition	MIN	MAX	Unit
repetitive peak reverse voltage	$V_{RMM}$	200		85	V
continuous reverse voltage	$V_R$	100		75	V
continuous forward current	$I_F$	250		210	mA
repetitive peak forward current	$I_{FRM}$	150		500	mA
non-repetitive peak forward current	$I_{FSM}$	square wave; $T_j = 25^\circ\text{C}$ prior to surge			A
		$t = 1\ \mu\text{s}$		4	
		$t = 1\ \text{ms}$		1	
		$t = 1\ \text{s}$		0.5	
total power dissipation	$P_{tot}$	$T_{amb} = 25^\circ\text{C}$	-65	250	mW
storage temperature	$T_{stg}$			+150	$^\circ\text{C}$
junction temperature	$T_j$			150	$^\circ\text{C}$



**BAS28**■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Test Condition	Min	Max	Unit
forward voltage	$V_F$	$I_F = 1 \text{ mA}$		715	mV
		$I_F = 10 \text{ mA}$		855	mV
		$I_F = 50 \text{ mA}$		1	V
		$I_F = 150 \text{ mA}$		1.25	V
reverse current	$I_R$	$V_R = 25 \text{ V}$		30	nA
		$V_R = 75 \text{ V}$		1	$\mu\text{A}$
		$V_R = 25 \text{ V}; T_j = 150^\circ\text{C}$		30	$\mu\text{A}$
		$V_R = 75 \text{ V}; T_j = 150^\circ\text{C}$		50	$\mu\text{A}$
diode capacitance	$C_d$	$f = 1 \text{ MHz}; V_R = 0$		1.5	pF
reverse recovery time	$t_{rr}$	when switched from $I_F = 10 \text{ mA}$ to $I_R = 10 \text{ mA}$ ;		4	ns
		$R_L = 100 \Omega$ measured at $I_R = 1 \text{ mA}$ ;			
forward recovery voltage	$V_{fr}$	when switched from $I_F = 10 \text{ mA}; t_r = 20 \text{ ns}$ ;		1.75	V

## ■ Marking

Marking	JT
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