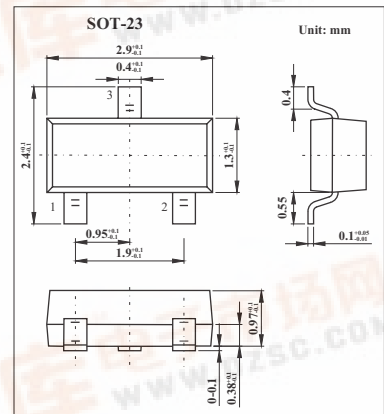


SMD Type Diodes

High-speed diode
BAS55

Features

- Small plastic SMD package
- High switching speed: max. 6ns
- Continuous reverse voltage: max. 60 V
- Repetitive peak forward current: max. 600 mA.



Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Conditions	Min	Max	Unit
Repetitive peak reverse voltage	VRRM			60	V
Continuous reverse voltage	VR			60	V
Continuous forward current	IF	Note 1		250	mA
Repetitive peak forward current	IFRM			600	mA
Non-repetitive peak forward current	IFSM	square wave; Tj = 25 °C prior to surge; t = 1 μs t = 100 μs t = 100 ms		9 3 1.7	A
Total power dissipation	Ptot	Tmab = 25 °C; Note 1		250	mW
Storage temperature	Tstg		-65	+150	°C
Junction temperature	Tj			150	°C

Note

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

High-speed diode

BAS55

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

Parameter	Symbol	Conditions	Max	Unit
Forward voltage	V_F	$I_F = 200\text{ mA}$; DC value; Note 1	1.0	V
Reverse current	I_R	$V_R = 60\text{ V}$;	100	nA
		$V_R = 60\text{ V}$; $T_j = 150^\circ\text{C}$	100	μA
Diode capacitance	C_d	$f = 1\text{ MHz}$; $V_R = 0$;	2.5	pF
Reverse recovery time	t_{rr}	when switched from $I_F = 400\text{ mA}$ to $I_R = 400\text{ mA}$; $R_L = 100\ \Omega$; measured at $I_R = 40\text{ mA}$;	6	ns
Forward recovery voltage	V_{fr}	when switched to $I_F = 400\text{ mA}$; $t_r = 30\text{ ns}$;	2	V
		when switched to $I_F = 400\text{ mA}$; $t_r = 100\text{ ns}$;	1.5	

Note

1. $T_{amb} = 25^\circ\text{C}$; device has reached the thermal equilibrium when mounted on an FR4 printed-circuit board.

■ Marking

Marking	L5p
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