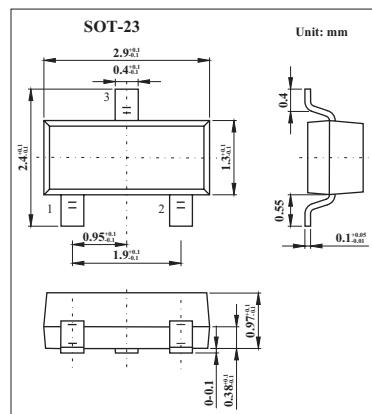


BAS678

■ Features

- Small plastic SMD package
- High switching speed: max. 6ns
- Continuous reverse voltage: max. 80 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			100	V
Continuous reverse voltage	VR			80	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 = 10 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.

BAS678

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Conditions	Min	Max	Unit
Forward voltage	V _F	I _F = 200 mA;d.c. ; Note 1		1.0	V
Reverse current	I _R	V _R = 10 V;		15	nA
		V _R = 75 V;		100	nA
		V _R = 75 V; T _j = 150 °C		50	μA
Diode capacitance	C _d	f = 1 MHz; V _R = 0;		2	pF
Reverse recovery time	t _{rr}	when switched from I _F = 400 mA to I _R = 400 mA; R _L = 100 Ω ;measured at I _R = 40 mA;		6	ns
Forward recovery voltage	V _{f r}	when switched from I _F = 10 mA;t _r = 20 ns;		2	V
thermal resistance from junction to tie-point	R _{th j-tp}			330	K/W
thermal resistance from junction to ambient	R _{th j-a}			500	K/W

Note

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

■ Marking

Marking	L52
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