

SMD Type

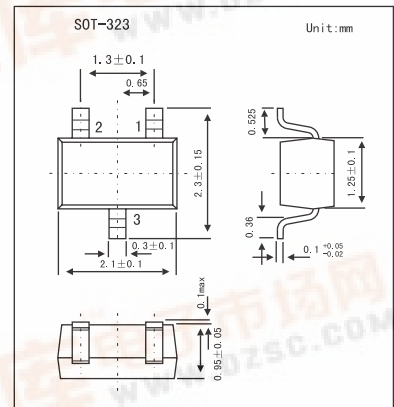
Diodes

Schottky barrier (double) diodes

BAT854W;BAT854AW
BAT854CW;BAT854SW

■ Features

- Very low forward voltage
- Very low reverse current
- Guard ring protected
- Very small SMD package.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Max	Unit
Continuous reverse voltage	V_R			40	V
Continuous forward current	I_F			200	mA
Repetitive peak forward current	I_{FRM}	$t_p \leq 1\text{ s}; d \leq 0.5$		300	mA
Non-repetitive peak forward current	I_{FSM}	$t = 8.3\text{ ms}$ half sinewave; JEDEC method		1	A
Storage temperature	T_{stg}		-65	+150	$^\circ\text{C}$
Junction temperature	T_j			150	$^\circ\text{C}$
Operating ambient temperature	T_{amb}		-65	+150	$^\circ\text{C}$
Thermal resistance from junction to ambient	$R_{th\ j-a}$			625	K/W

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

Parameter	Symbol	Conditions	Typ	Max	Unit
Forward voltage	V_F	$I_F = 0.1\text{ mA}$	200		mV
		$I_F = 1\text{ mA}$	260		
		$I_F = 10\text{ mA}$	340		
		$I_F = 30\text{ mA}$		420	
		$I_F = 100\text{ mA}$		550	
Continuous reverse current	I_R	$V_R = 25\text{ V}$; Note 1		0.5	$\mu\text{ A}$
Diode capacitance	C_d	$f = 1\text{ MHz}; V_R = 1\text{ V}$		20	pF

Note

1. Pulse test: $t_p < 300\text{ }\mu\text{ s}$; $\delta \leq 0.02$.

■ Marking

Type	BTA854W	BAT854AW	BAT854CW	BAT854SW
Marking	81	82	83	84