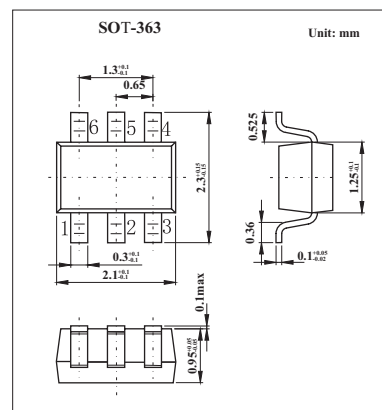


Schottky Barrier Double Diode

BAT74S

■ Features

- Low forward voltage
- Guard ring protected
- Small SMD package.

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

Parameter	Symbol	Conditions	Min	Max	Unit
Per diode					
continuous reverse voltage	V_R			30	V
continuous forward current	I_F			200	mA
repetitive peak forward current	I_{FRM}	$t_p \leq 1\text{ s}; \delta \leq 0.5$		300	mA
non-repetitive peak forward current	I_{FSM}	$t_p < 10\text{ ms}$		600	mA
storage temperature	T_{stg}		-65	+150	$^\circ\text{C}$
junction temperature	T_j			125	$^\circ\text{C}$
operating ambient temperature	T_{amb}		-65	+125	$^\circ\text{C}$
Double diode operation					
continuous reverse voltage	V_R			30	V
continuous reverse voltage	V_R	series connection		60	V
continuous forward current	I_F			110 ⁽¹⁾	mA
repetitive peak forward current	I_{FRM}	$t_p \leq 1\text{ s}; \delta \leq 0.5$		200	mA
thermal resistance from junction to ambient	$R_{th\ j-a}$			416	K/W

Note

1. If both diodes are in forward operation at the same moment, total device current is max. 110 mA.

If one diode is in reverse and the other in forward operation at the same moment, total device current is max. 200 mA.

BAT74S■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	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	
		$I_F = 100\text{ mA}$	750	
reverse current	I_R	$V_R = 25\text{ V}$; note 1	2	$\mu\text{ A}$
reverse recovery time	t_{rr}	when switched from $I_F = 10\text{ mA}$ to $I_R = 10\text{ mA}$; $R_L = 100\ \Omega$; measured at $I_R = 1\text{ mA}$	5	ns
diode capacitance	C_d	$f = 1\text{ MHz}$; $V_R = 1\text{ V}$	10	pF

Note

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

■ Marking

Marking	74
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