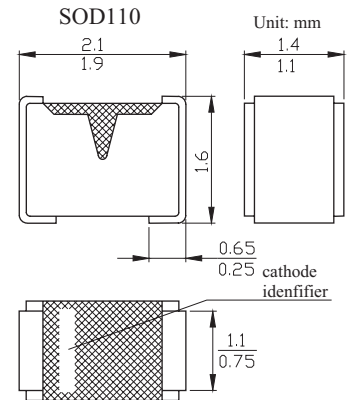


## Schottky barrier diode

## BAT254

## ■ Features

- Low forward voltage
- Guard ring protected
- Very small ceramic SMD package.

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

Parameter	Symbol	Conditions	Min	Max	Unit
Continuous reverse voltage	$V_R$			30	V
Continuous forward current	$I_F$			200	mA
Repetitive peak forward current	$I_{FSM}$	$t_p \leq 1\text{s}; \delta \leq 0.5$		300	mA
Non-repetitive peak forward current	$I_{FSM}$	$t_p < 1\text{s}$		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	$^\circ\text{C}$

## Schottky barrier diode

## BAT254

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

Parameter	Symbol	Conditions	Max	Unit
forward voltage	$V_F$	$I_F = 0.1 \text{ mA}$	240	mV
		$I_F = 1 \text{ mA}$	320	
		$I_F = 10 \text{ mA}$	400	
		$I_F = 30 \text{ mA}$	500	
		$I_F = 100 \text{ mA}$	800	
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
thermal resistance from junction to ambient	$R_{th\ j-a}$	note 2	315	K/W

Note

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

2.Refer to SOD110 standard mounting conditions.

## ■ Marking

Marking	L4
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