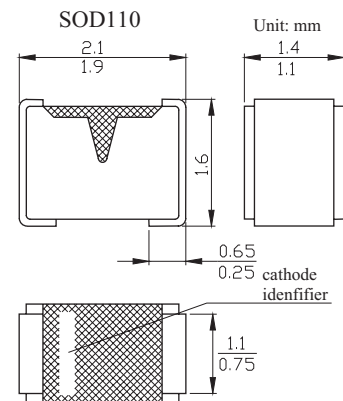


Schottky barrier diode

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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