



BAT54 series

Schottky barrier diodes

Rev. 5 — 5 October 2012

Product data sheet

1. Product profile

1.1 General description

Planar Schottky barrier diodes with an integrated guard ring for stress protection, encapsulated in a small SOT23 (TO-236AB) Surface-Mounted Device (SMD) plastic package.

1.2 Features and benefits

- Low forward voltage
- Low capacitance
- AEC-Q101 qualified

1.3 Applications

- Ultra high-speed switching
- Line termination
- Voltage clamping
- Reverse polarity protection

1.4 Quick reference data

Table 1. Quick reference data

$T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified.

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
Per diode						
V_R	reverse voltage		-	-	30	V
V_F	forward voltage	$I_F = 100\text{ mA}$	[1] -	-	800	mV
I_R	reverse current	$V_R = 25\text{ V}$	[1] -	-	2	μA

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

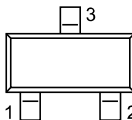
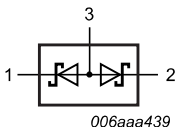
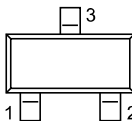
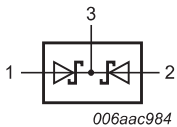
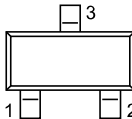
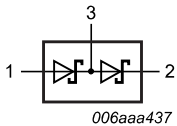
2. Pinning information

Table 2. Pinning

Pin	Description	Simplified outline	Graphic symbol
BAT54			
1	anode		
2	not connected		
3	cathode		



Table 2. Pinning ...continued

Pin	Description	Simplified outline	Graphic symbol
BAT54A			
1	cathode (diode 1)		
2	cathode (diode 2)		
3	common anode		
BAT54C			
1	anode (diode 1)		
2	anode (diode 2)		
3	common cathode		
BAT54S			
1	anode (diode 1)		
2	cathode (diode 2)		
3	cathode (diode 1), anode (diode 2)		

3. Ordering information

Table 3. Ordering information

Type number	Package		
	Name	Description	Version
BAT54 series	-	plastic surface-mounted package; 3 leads	SOT23

4. Marking

Table 4. Marking codes

Type number	Marking code ^[1]
BAT54	L4*
BAT54A	*V3
BAT54C	*W1
BAT54S	*V4

[1] * = placeholder for manufacturing site code.