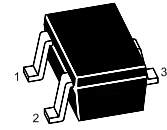
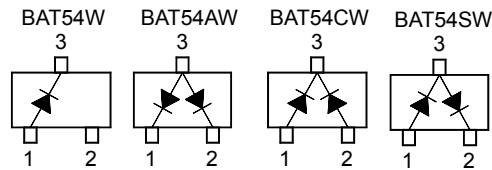


BAT54W / AW / CW / SW

Surface Mount Schottky Barrier Diode

Features

- Low forward voltage



SOT-323 Plastic Package

Applications

- Ultra high-speed switching
- Voltage clamping
- Protection circuits

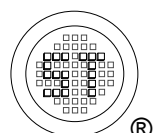
BAT54W Marking Code: L4
BAT54AW Marking Code: L42
BAT54CW Marking Code: L43
BAT54SW Marking Code: L44

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Reverse Voltage	V_R	30	V
Forward Current	I_F	200	mA
Repetitive Peak Forward Current	I_{FRM}	300	mA
Peak Forward Surge Current ($t_p = 10 \text{ ms}$)	I_{FSM}	600	mA
Total Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 0.1 \text{ mA}$ at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 30 \text{ mA}$ at $I_F = 100 \text{ mA}$	V_F	- - - - -	240 320 400 500 1000	mV
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	30	-	V
Reverse Current at $V_R = 25 \text{ V}$	I_R	-	2	μA
Total Capacitance at $V_R = 1 \text{ V}$, $f = 1 \text{ MHz}$	C_T	-	10	pF
Reverse Recovery Time at $I_F = 10 \text{ mA}$ through $I_R = 10 \text{ mA}$ to $I_R = 1 \text{ mA}$, $R_L = 100 \Omega$	t_{rr}	-	5	ns



Electrical characteristic curves

Fig 1. Reverse Characteristic Curve

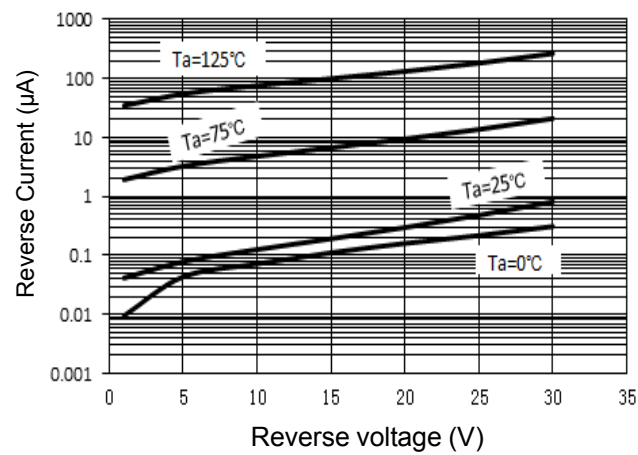


Fig 2. Forward Characteristic Curve

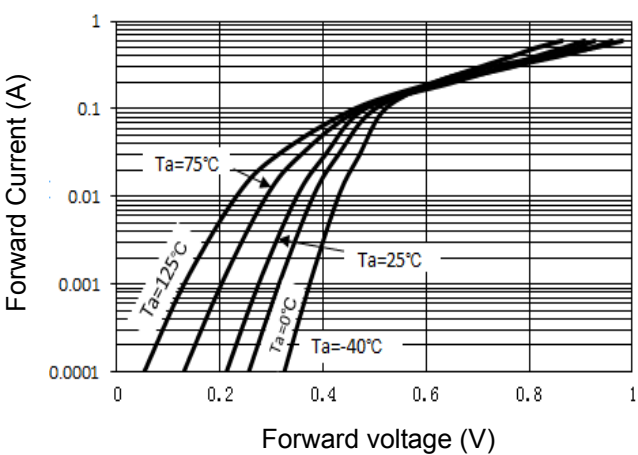
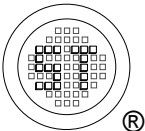
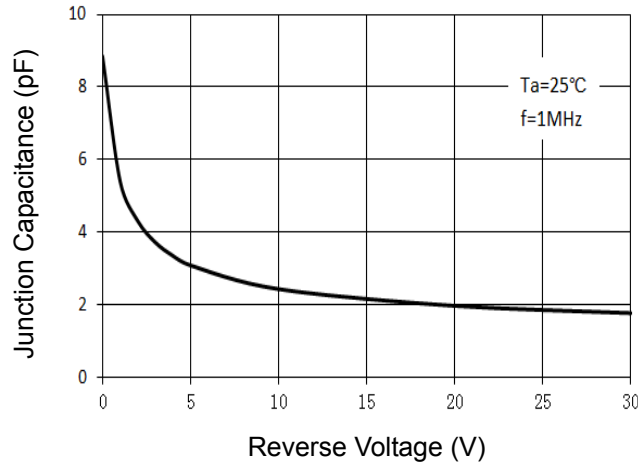


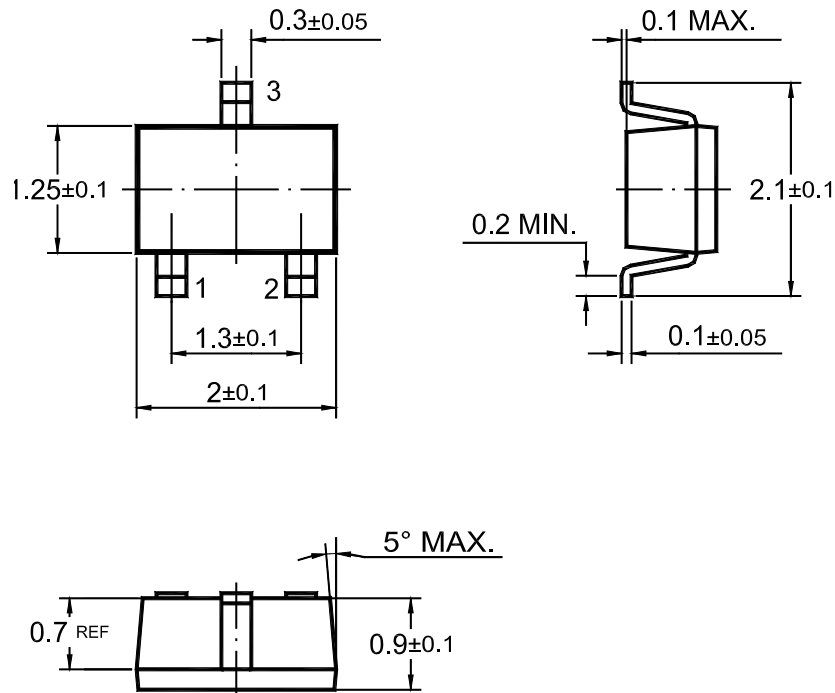
Fig 3. Junction Capacitance



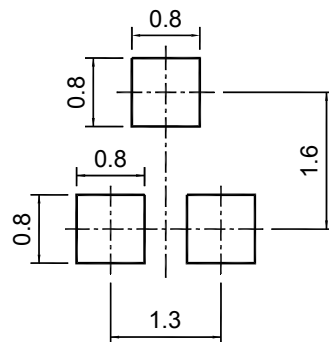
BAT54W / AW / CW / SW

PACKAGE OUTLINE(Dimensions in mm)

SOT-323



Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-323	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" *** " = Part No.
 " YM " = Date Code Marking
 " Y " = Year
 " M " = Month
 Font type: Arial

