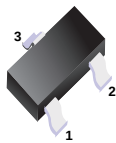
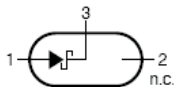


■ Features

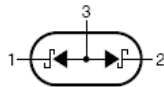
- Extremely Fast Switching Speed
- Low forward voltage



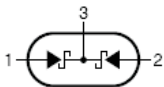
■ Simplified outline(SOT-323)



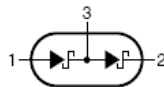
BAT54W



BAT54AW

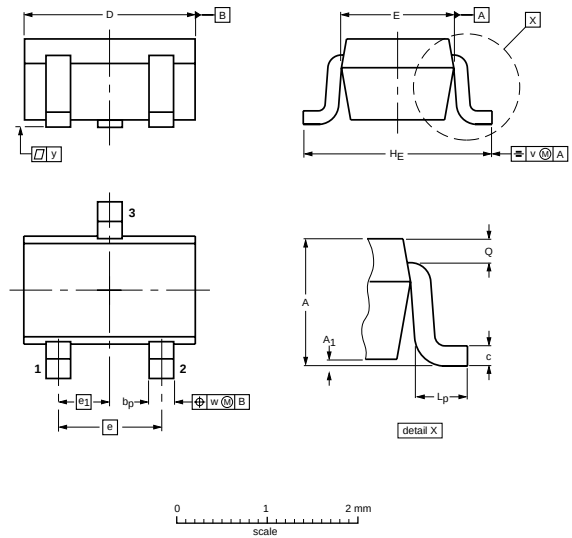


BAT54CW



BAT54SW

SOT-323



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.8	0.1	0.4 0.3	0.25 0.10	2.2 1.8	1.35 1.15	1.3	0.65	2.2 2.0	0.45 0.15	0.23 0.13	0.2	0.2

■ Absolute Maximum Ratings T_a = 25℃

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	30	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
Forward Continuous Current	I _{FM}	200	mA
Non-repetitive Peak Forward Surge Current @ t=8.3ms	I _{FSM}	600	
Repetitive Peak Forward Current @ t ≤ 1s, δ ≤ 0.5	I _{FRM}	300	
Power Dissipation	P _D	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	500	℃/W
Junction Temperature	T _J	125	℃
Storage Temperature range	T _{stg}	-55 to 150	

BAT54W/AW/CW/SW

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	$V_{(BR)}$	$I_R = 100\ \mu\text{A}$	30			V
Forward Voltage	V_{F1}	$I_F = 0.1\ \text{mA}$			0.24	
	V_{F2}	$I_F = 1\ \text{mA}$			0.32	
	V_{F3}	$I_F = 10\ \text{mA}$			0.40	
	V_{F4}	$I_F = 30\ \text{mA}$			0.50	
	V_{F5}	$I_F = 100\ \text{mA}$			1	
Leakage Current	I_R	$V_R = 25\ \text{V}$			2	μA
Diode Capacitance	C_D	$V_R = 0\ \text{V}$, $f = 1\ \text{MHz}$			10	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 10\ \text{mA}$, $I_{rr} = 0.1 \times I_R$, $R_L = 100\ \Omega$			5	ns

■ Marking

Type	BAT54W	BAT54AW	BAT54CW	BAT54SW
Marking	KL5 or L4	KL6 or L42	KL7 or L43	KL8 or L44

RATING AND CHARACTERISTIC CURVES (BAT54W/AW/CW/SW)

