



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

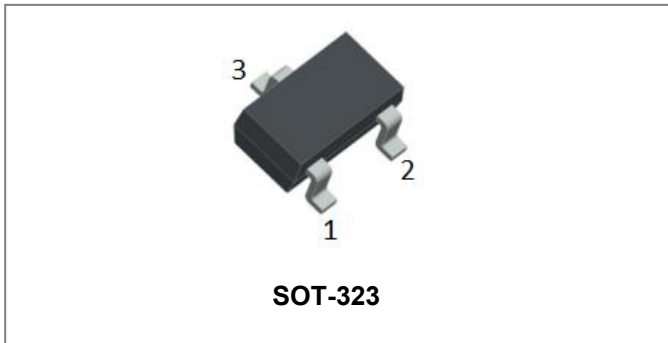
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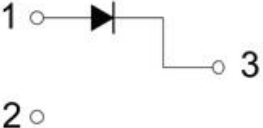
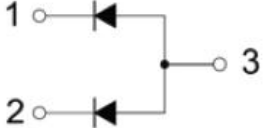
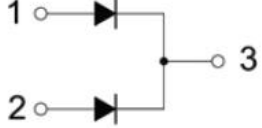
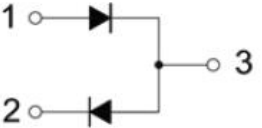
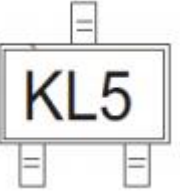


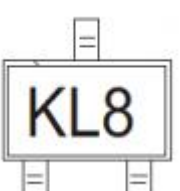


BAT54W/AW/CW/SW SCHOTTKY BARRIER DIODE



Features

- Extremely Fast Switching Speed
- Low forward voltage
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

BAT54W	BAT54AW	BAT54CW	BAT54SW
			
MARKING:KL5	MARKING:KL6	MARKING:KL7	MARKING:KL8
			

Maximum Ratings@T_A=25°C unless otherwise specified

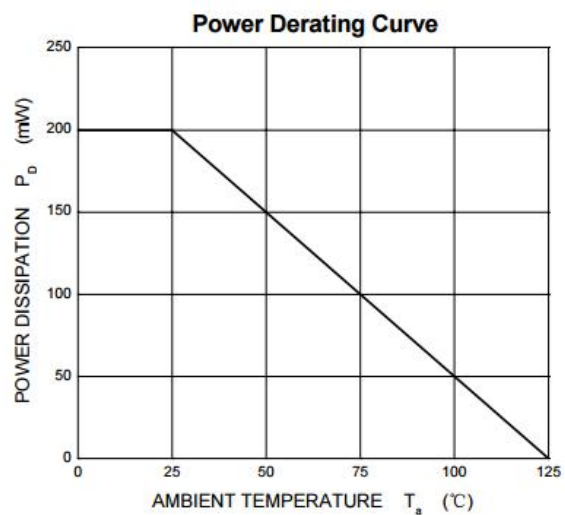
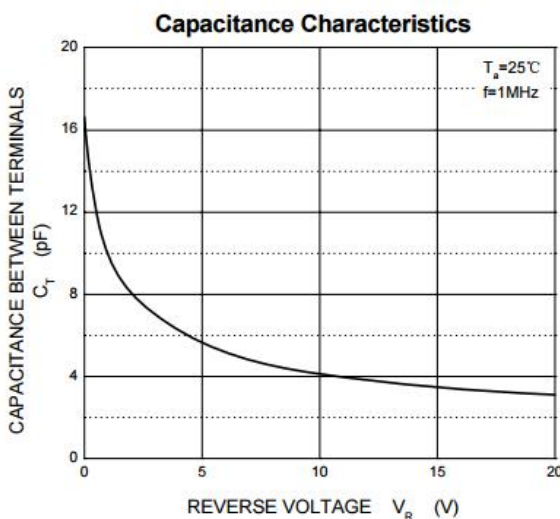
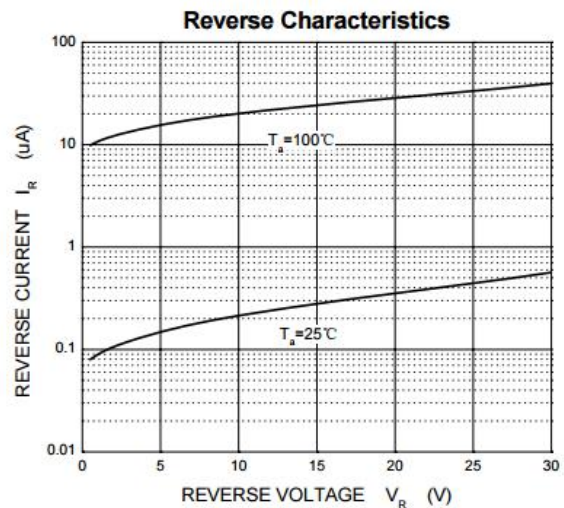
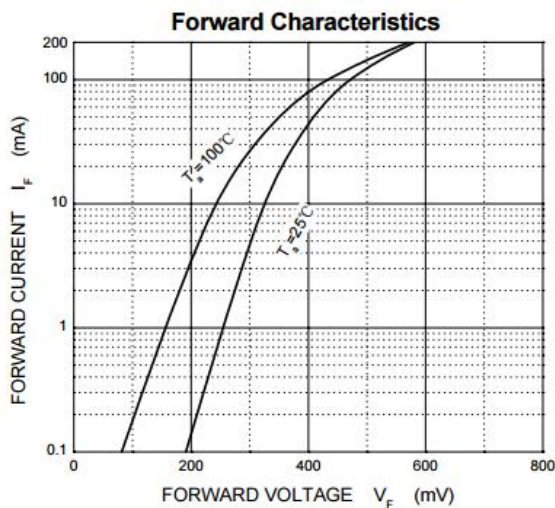
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	Limit	Units
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 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	600	mA
Power Dissipation	P _d	200	mW
Typical Thermal Resistance Junction to Ambient	R _{θJA}	500	°C/W
Junction Temperature Range	T _J	125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Max	Units	Test Condition
Forward Voltage*	V_F	0.24 0.32 0.40 0.50 1.0	V	$I_F=0.1\text{mA}$ $I_F=1\text{mA}$ $I_F=10\text{mA}$ $I_F=30\text{mA}$ $I_F=100\text{mA}$
Reverse Leakage Current*	I_R	2	μA	$V_R=25\text{V}$
Diode capacitance	C_T	10	pF	$V_R=1\text{V}, f=1.0\text{MHz}$
Reverse recovery time	t_{rr}	5	ns	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$

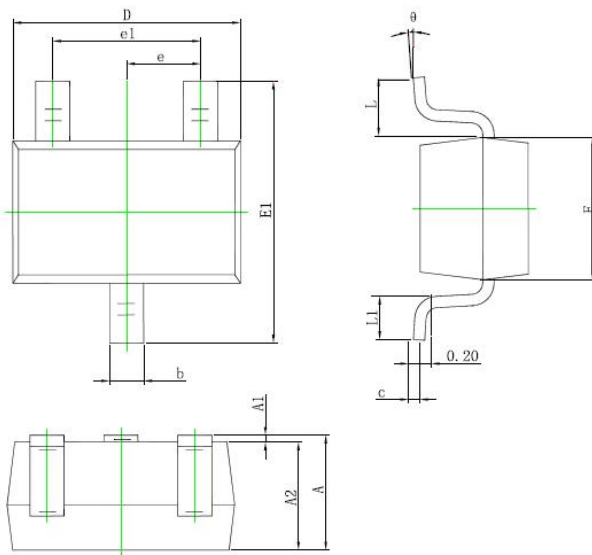
* Pulse width < 300 μs , duty cycle < 2%

Ratings and Characteristics Curves


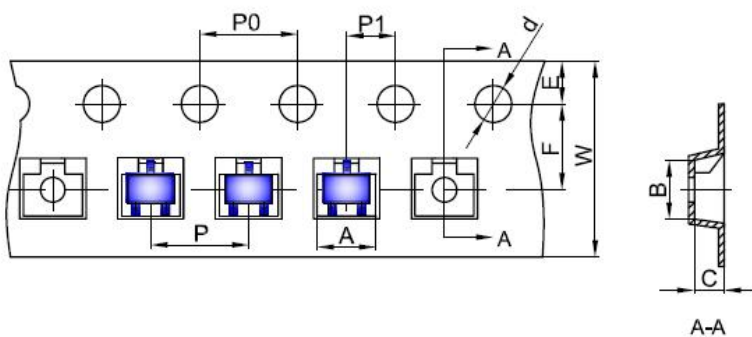
Ordering Information

Device	Package	Shipping
BAT54W/AW/CW/SW	SOT-323(Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Mechanical Dimensions SOT-323


SYMBOL	Millimeters		Inches	
	MIN.	MAX.	MIN.	MAX.
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP.		0.026 TYP.	
e1	1.200	1.400	0.047	0.055
L	0.525 REF.		0.021 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Carrier Tape Specification SOT-323


SYMBOL	Millimeters	
	Min.	Max.
A	2.20	2.30
B	2.50	2.60
C	1.14	1.24
d	1.45	1.65
E	1.65	1.85
F	3.40	3.60
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30

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