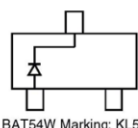
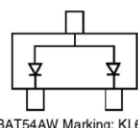


BAT54W/AW/CW/SW Schottky Barrier Diode
Feature

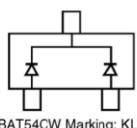
- Extremely Fast Switch Speed
- Low Forward Voltage



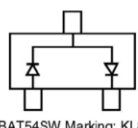
BAT54W Marking: KL5



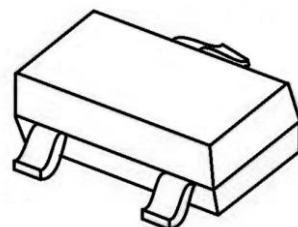
BAT54AW Marking: KL6



BAT54CW Marking: KL7



BAT54SW Marking: KL8

SOT-323

MARKING:

BAT54W	BAT54AW	BAT54CW	BAT54SW

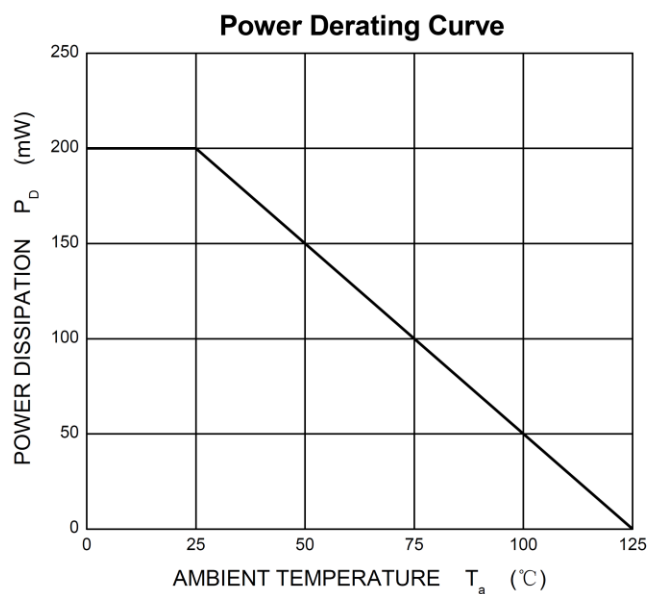
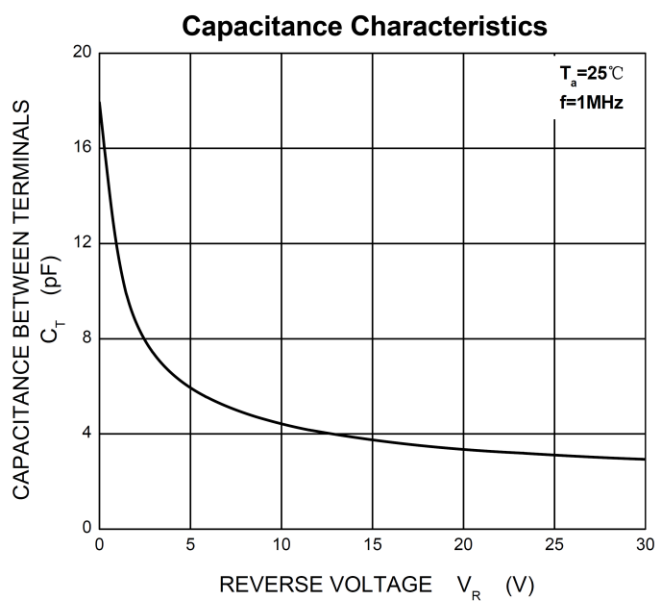
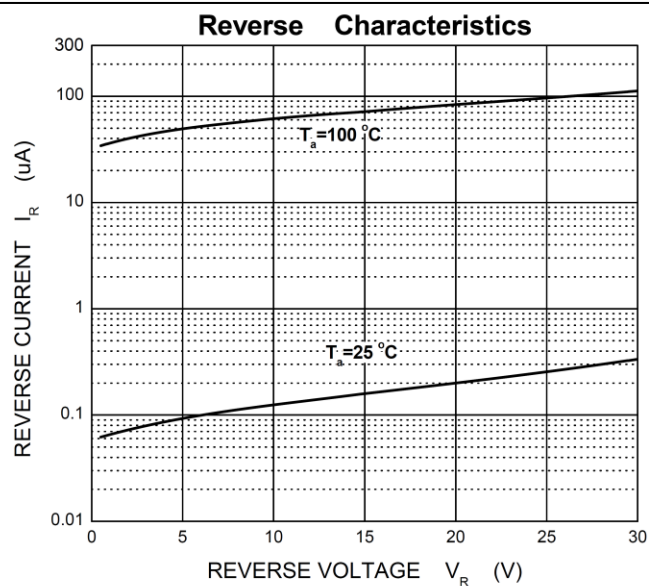
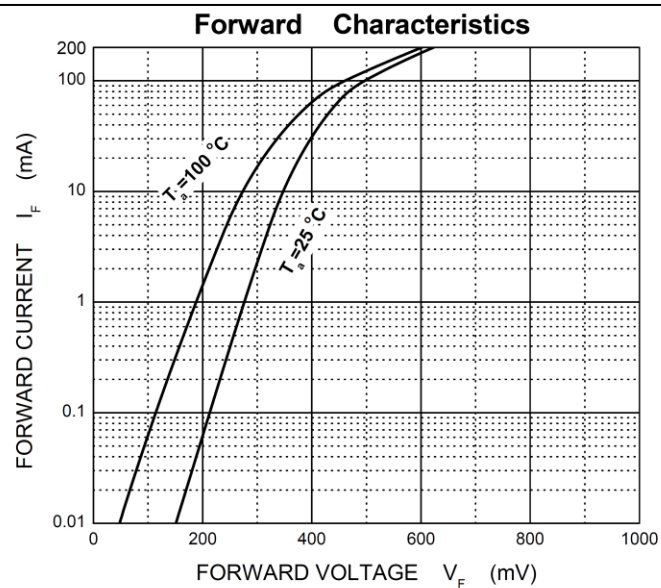
ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

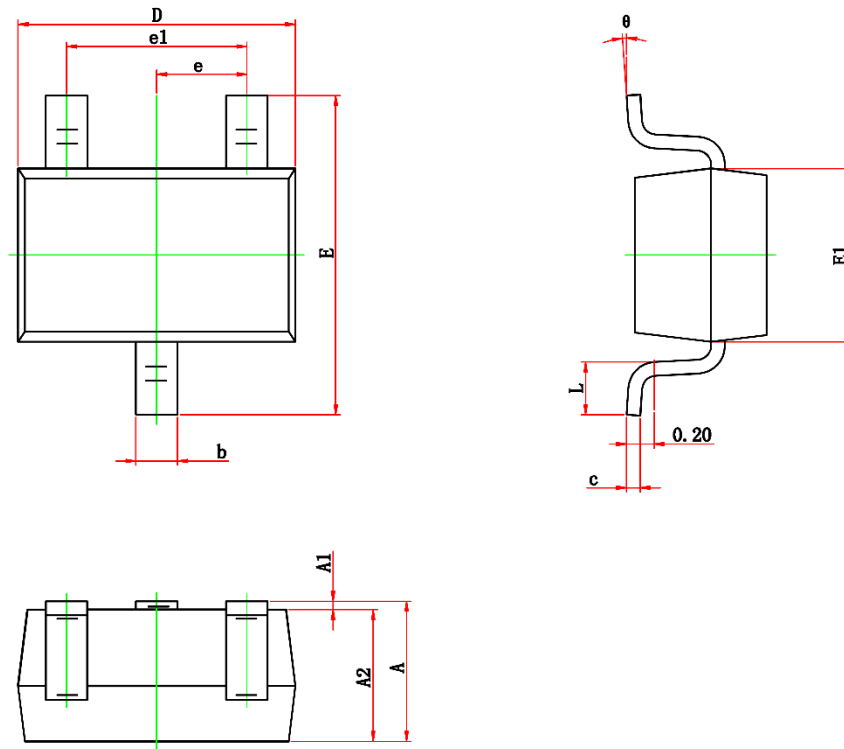
Parameter	Symbol	Value	Unit
DC Reverse Voltage	V_R	30	V
Mean Rectifying Current	I_O	0.2	A
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	0.6	A
Power Dissipation	P_D	0.2	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}\text{C/W}$
Junction Temperature	T_J	125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	30			V
Forward Voltage	V_{F1}	$I_F=0.1\text{mA}$			0.24	V
	V_{F2}	$I_F=1\text{mA}$			0.32	V
	V_{F3}	$I_F=10\text{mA}$			0.40	V
	V_{F4}	$I_F=30\text{mA}$			0.50	V
	V_{F5}	$I_F=100\text{mA}$			1	V
Reverse Current	I_R	$V_R=25\text{V}$			2	μA
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}$, $I_{rr}=0.1^* I_R$, $R_L=100\Omega$			5	ns
Capacitance Between Terminals	C_T	$V_R=1\text{V}$, $f=1\text{MHz}$			10	pF

Typical Characteristics



SOT-323 Package Outline Dimensions


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.800	1.100	0.031	0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.100	0.031	0.043
b	0.200	0.400	0.008	0.016
c	0.050	0.150	0.002	0.006
D	1.900	2.200	0.075	0.087
E	2.000	2.450	0.079	0.096
E1	1.150	1.350	0.045	0.053
e	0.650TYP.		0.026TYP.	
e1	1.200	1.400	0.047	0.055
L	0.200	0.460	0.008	0.018
θ	0°	8°	0°	8°

Attention:

- GreenPower Electronics reserves the right to improve product design function and reliability without notice.
- Any and all semiconductor products have certain probability to fail or malfunction, which may result in personal injury, death or property damage. Customer are solely responsible for providing adequate safe measures when design their systems.
- GreenPower Electronics products belong to consumer electronics or other civilian electronic products.