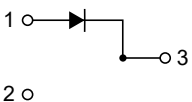
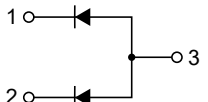
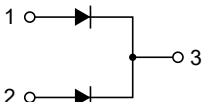
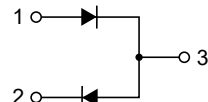


1.Features

- Extremely Fast Switching Speed
- BAT54/A/C/S, SCHOTTKY BARRIER DIODE

2.Pinning Information

UMW BAT54	UMW BAT54A	UMW BAT54C	UMW BAT54S
			
MARKING: KL1/D3E	MARKING: KL2	MARKING: KL3	MARKING: KL4
 	 	 	 

Solid dot = Green molding compound device, if none, the normal device



3. Limiting Service Range

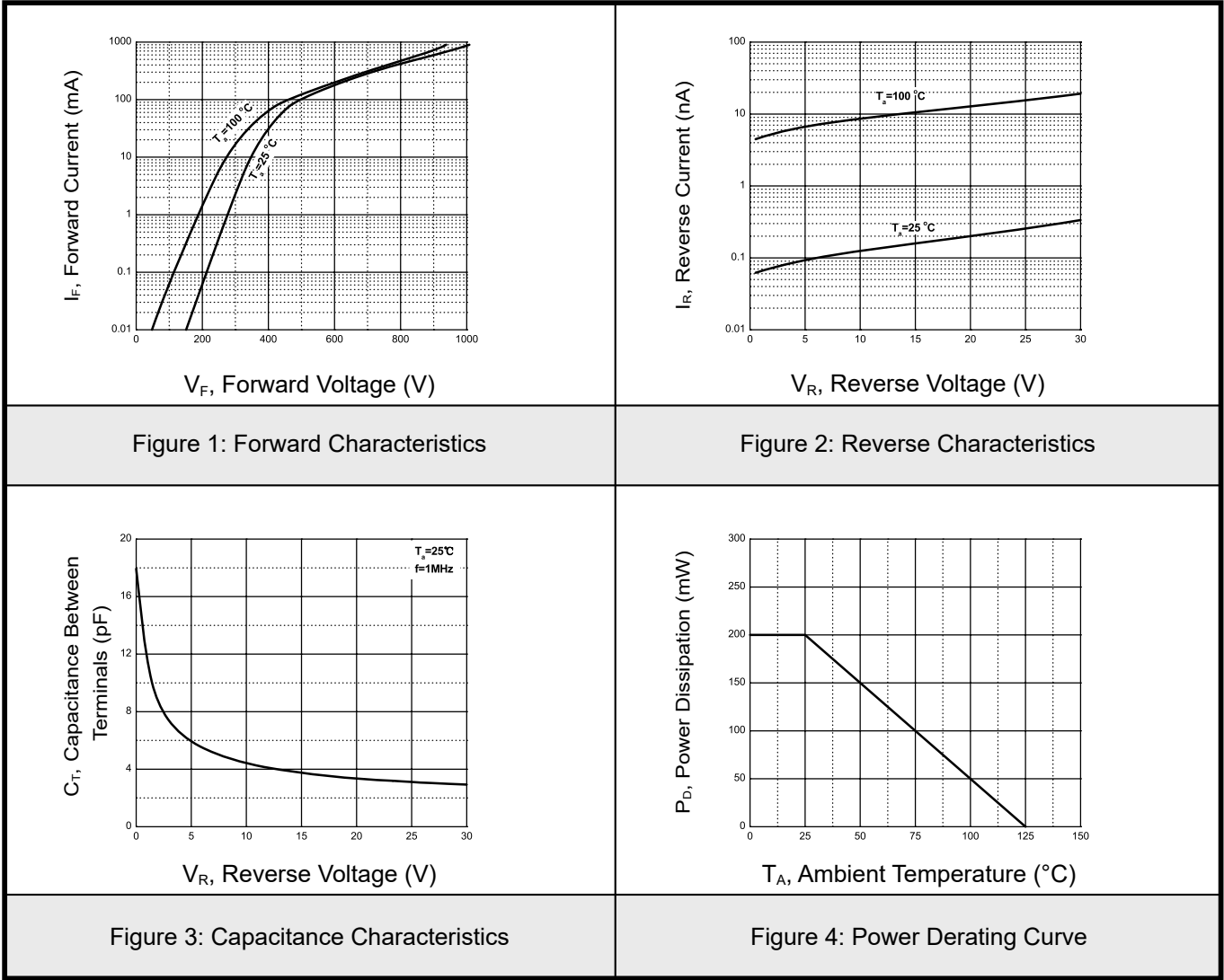
Parameter	Symbol	Value	Units
Repetitive peak reverse voltage	V_{RRM}	30	V
Working peak reverse voltage	V_{RWM}		
DC blocking voltage	V_R		
Forward continuous current	I_{FM}	200	mA
Non-repetitive Peak Forward Surge Current @ $t < 1s$	I_{FSM}	600	mA
Repetitive Peak Forward Current @ $t \leq 1s, \delta \leq 0.5$	I_{FRM}	300	mA
Power dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	$^{\circ}C/W$
Junction temperature	T_J	125	$^{\circ}C$
Storage temperature	T_{STG}	-55 to 150	$^{\circ}C$

4. Electrical Characteristics ($T_A = 25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Conditions	Min	Max	Units
Reverse voltage	$V_{(BR)}$	$I_R = 100\mu A$	30		V
Forward voltage	V_F	$I_{F1} = 0.1mA$		0.24	V
		$I_{F2} = 1mA$		0.32	V
		$I_{F3} = 10mA$		0.4	V
		$I_{F4} = 30mA$		0.5	V
		$I_{F5} = 100mA$		1	V
Reverse current	I_R	$V_R = 25V$		2	μA
Diode capacitance	C_D	$V_R = 1V, f = 1MHz$		10	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 10mA, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$		5	ns

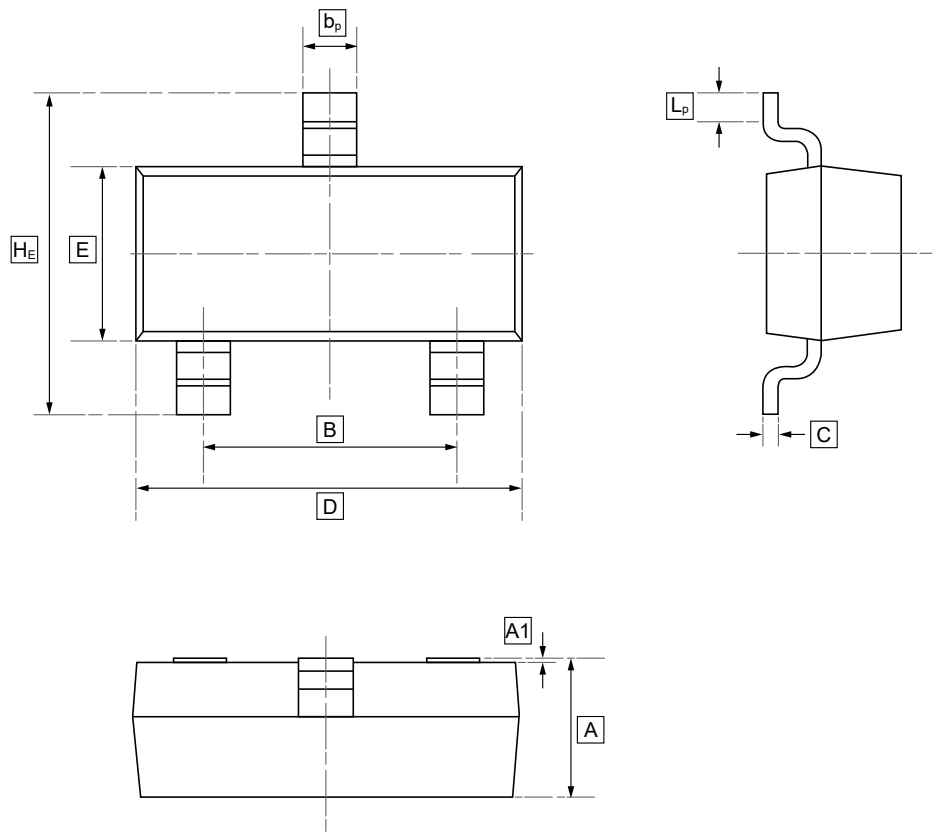


5. Typical Characteristic





6.SOT-23 Package Outline Dimensions

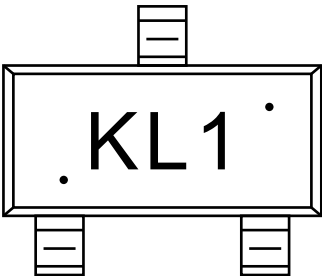


DIMENSIONS (mm are the original dimensions)

Symbol	A	B	b _p	C	D	E	H _E	A1	L _p
Min	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20
Max	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50



7.Ordering Information



Order Code	Marking	Package	Base QTY	Delivery Mode
UMW BAT54	KL1	SOT-23	3000	Tape and reel
UMW BAT54A	KL2	SOT-23	3000	Tape and reel
UMW BAT54C	KL3	SOT-23	3000	Tape and reel
UMW BAT54S	KL4	SOT-23	3000	Tape and reel



8.Disclaimer

UMW reserves the right to make changes to all products, specifications. Customers should obtain the latest version of product documentation and verify the completeness and currency of the information before placing an order.

When applying our products, please do not exceed the maximum rated values, as this may affect the reliability of the entire system. Under certain conditions, any semiconductor product may experience faults or failures. Buyers are responsible for adhering to safety standards and implementing safety measures during system design, prototyping, and manufacturing when using our products to prevent potential failure risks that could lead to personal injury or property damage.

Unless explicitly stated in writing, UMW products are not intended for use in medical, life-saving, or life-sustaining applications, nor for any other applications where product failure could result in personal injury or death. If customers use or sell the product for such applications without explicit authorization, they assume all associated risks.

When reselling, applying, or exporting, please comply with export control laws and regulations of China, the United States, the United Kingdom, the European Union, and other relevant countries, regions, and international organizations.

This document and any actions by UMW do not grant any intellectual property rights, whether express or implied, by estoppel or otherwise. The product names and marks mentioned herein may be trademarks of their respective owners.