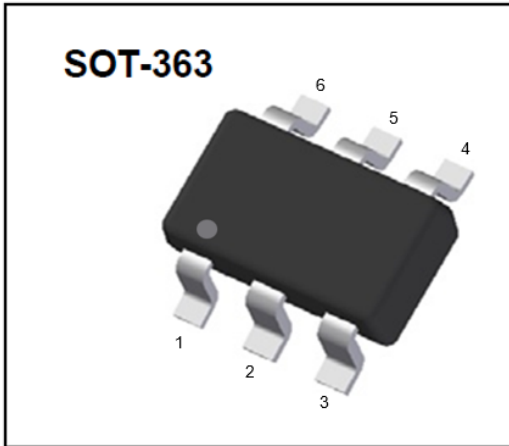




## Schottky Barrier Diodes



### Features

- We declare that the material of product compliance with RoHS requirements and Halogen Free
- Surface mount package ideally suited for automatic Insertion
- Moisture Sensitivity Level 1
- Reverse voltage: 30 V
- Average forward current : 200mA

### Application

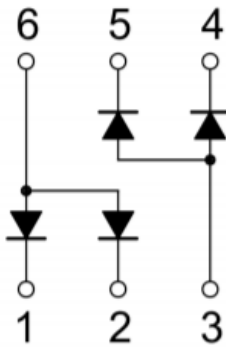
- Fast switching
- Low forward voltage drop

### Mechanical Data

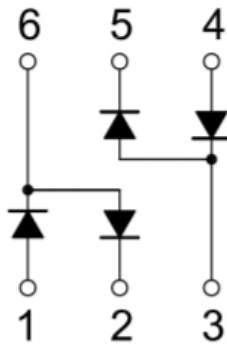
- Package: SOT-363
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Marking:

BAT54ADW	KL6
BAT54SDW	KL8
BAT54TW	KLA
BAT54DW	KLD

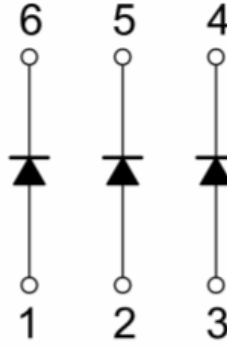
### Equivalent circuit



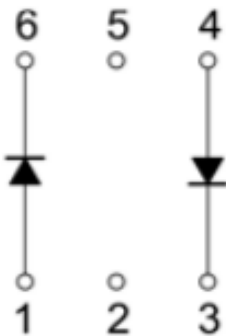
BAT54ADW



BAT54SDW



BAT54TW



BAT54DW



# BAT54ADW/BAT54SDW/BAT54TW/BAT54DW

## ■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	$V_{RRM}$	V		30
Reverse voltage	$V_R$	V		30
Non-repetitive peak forward surge current	$I_{FSM}$	A	@8.3ms, half-sine wave	0.6
Average forward current	$I_{FAV}$	mA		200
Power dissipation	$P_D$	mW		150
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	°C/W		667
Maximum junction temperature	$T_j$	°C		-55 ~+125
Storage temperature range	$T_{sig}$	°C		-55 ~+150

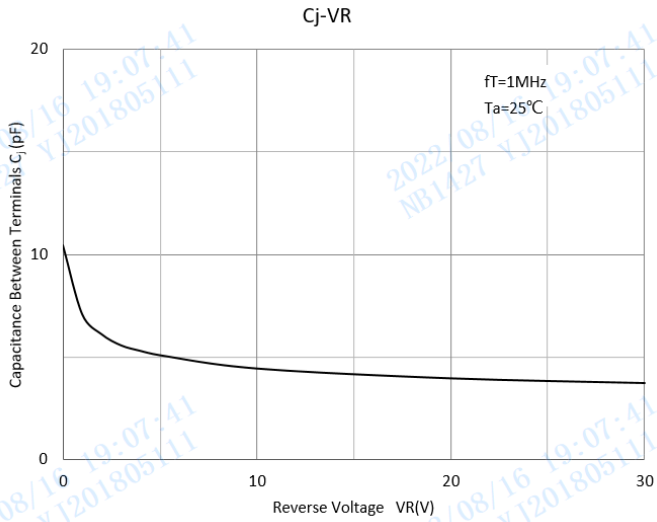
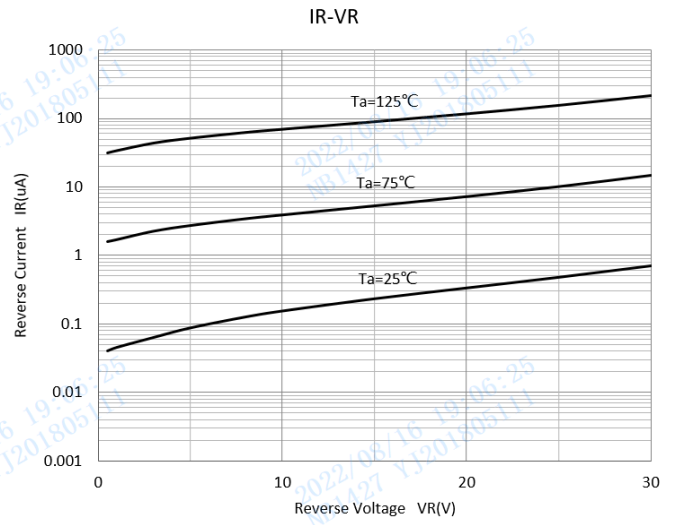
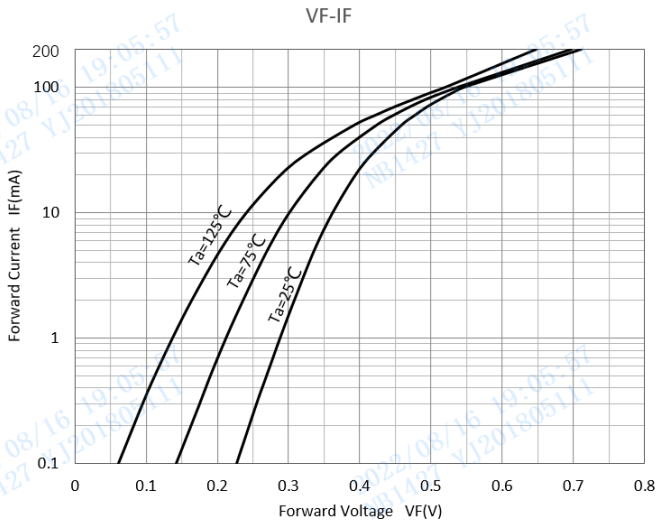
## ■ Electrical Characteristics (Ta=25°C unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	$V_R$	V	$I_R=100\mu A$	30	-
Forward Voltage	$V_F$	V	$I_F=0.1mA$	-	0.24
			$I_F=1mA$	-	0.32
			$I_F=10mA$	-	0.4
			$I_F=30mA$	-	0.5
			$I_F=100mA$	-	1
Reverse Leakage Current	$I_R$	$\mu A$	$V_R=25V$	-	2
Capacitance	$C_j$	pF	$V_R=1V, f=1MHz$	-	10



# BAT54ADW/BAT54SDW/BAT54TW/BAT54DW

## ■ Electrical Characteristics (Typical)



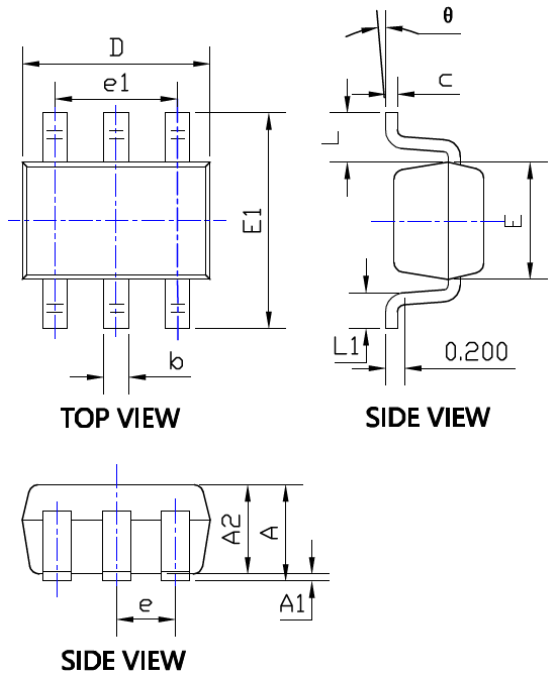


# BAT54ADW/BAT54SDW/BAT54TW/BAT54DW

## ■ Ordering Information (Example)

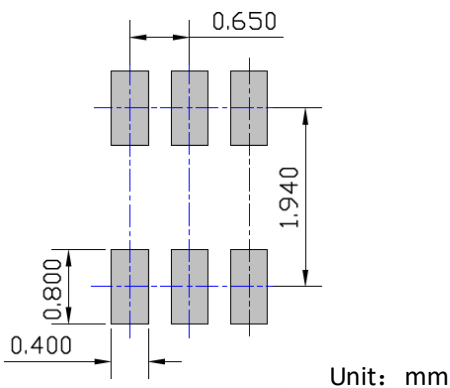
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT54ADW	F2	Approximate 0.009g	3000	30000	120000	7" reel
BAT54SDW	F2	Approximate 0.009g	3000	30000	120000	7" reel
BAT54TW	F2	Approximate 0.009g	3000	30000	120000	7" reel
BAT54DW	F2	Approximate 0.009g	3000	30000	120000	7" reel

## ■ SOT-363 Package Outline Dimensions



SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.043	0.900	1.100
A1	0.000	0.004	0.000	0.100
A2	0.035	0.039	0.900	1.000
b	0.006	0.014	0.150	0.350
c	0.004	0.010	0.100	0.250
D	0.071	0.087	1.800	2.200
E	0.045	0.053	1.150	1.350
E1	0.085	0.096	2.150	2.450
e	0.026TYP		0.650TYP	
e1	0.047	0.055	1.200	1.400
L	0.021REF		0.525REF	
L1	0.010	0.018	0.260	0.460
θ	0°	8°	0°	8°

## ■ SOT-363 Soldering Footprint





## Disclaimer

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