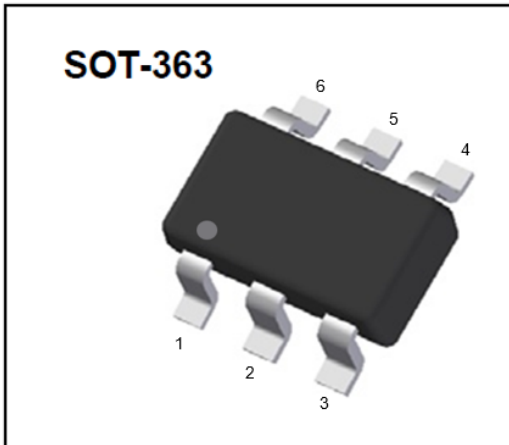




Schottky Barrier Diodes



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

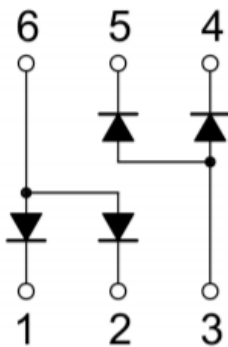
- Fast switching
- Low forward voltage drop

Mechanical Data

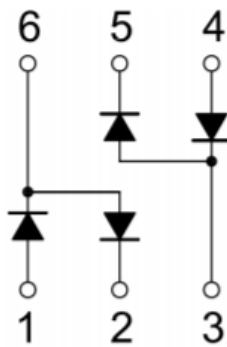
- Package: SOT-363
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Marking:

BAT54ADW	KL6
BAT54SDW	KL8
BAT54TW	KLA
BAT54DW	KLD
BAT54BRW	KLB

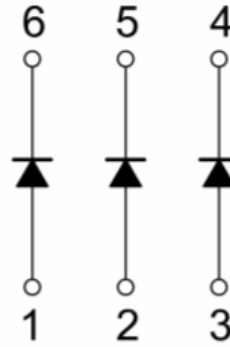
Equivalent circuit



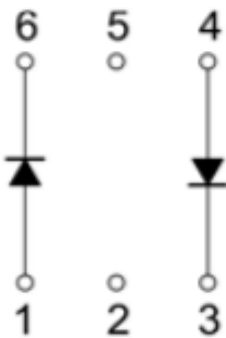
BAT54ADW



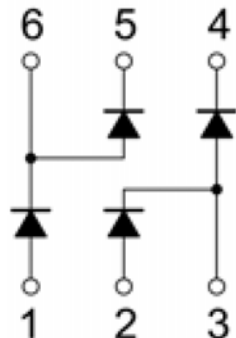
BAT54SDW



BAT54TW



BAT54DW



BAT54BRW



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

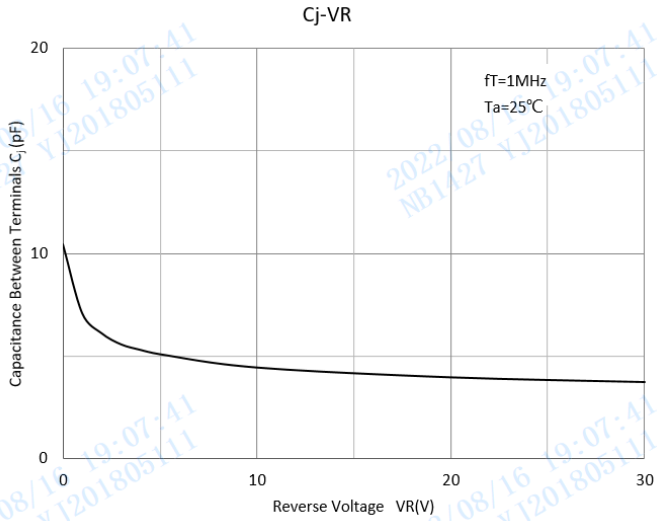
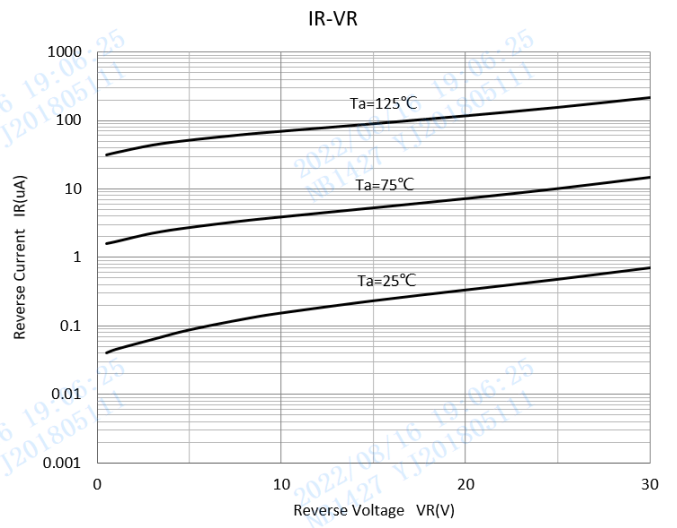
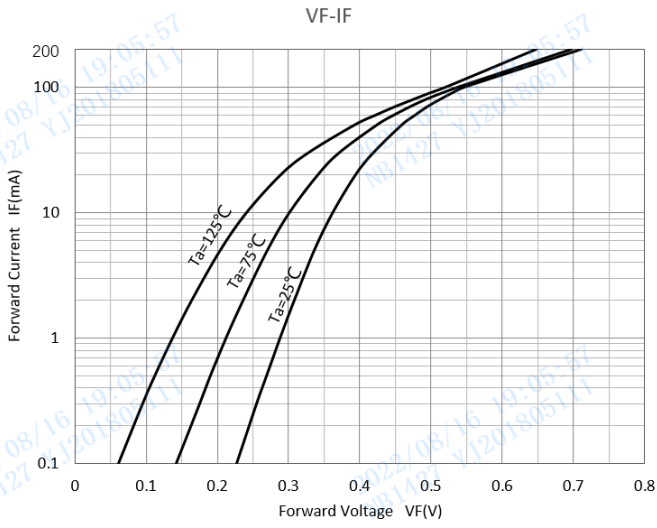
PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V_{RRM}	V		30
Reverse voltage	V_R	V		30
Non-repetitive peak forward surge current	I_{FSM}	A	@8.3ms, half-sine wave	0.6
Average forward current	I_{FAV}	mA		200
Power dissipation	P_D	mW		150
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	°C/W		667
Maximum junction temperature	T_j	°C		-55 ~+125
Storage temperature range	T_{stg}	°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	μA	$V_R=25V$	-	2
Capacitance	C_j	pF	$V_R=1V, f=1MHz$	-	10



■ Electrical Characteristics (Typical)

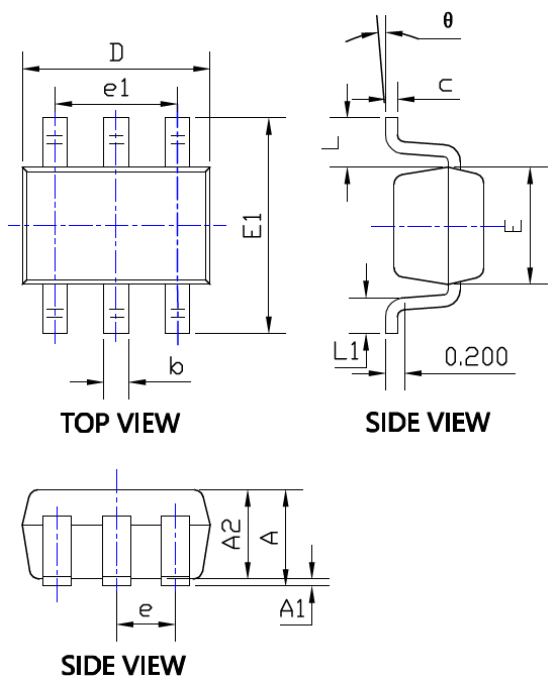




■ **Ordering Information (Example)**

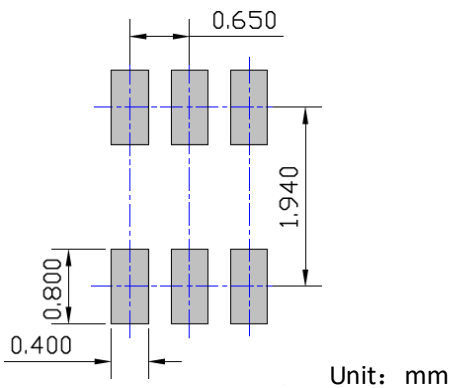
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT54ADW	F2	Approximate 0.009g	3000	30000	120000	7" reel
BAT54SDW	F2	Approximate 0.009g	3000	30000	120000	7" reel
BAT54TW	F2	Approximate 0.009g	3000	30000	120000	7" reel
BAT54DW	F2	Approximate 0.009g	3000	30000	120000	7" reel
BAT54BRW	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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The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

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