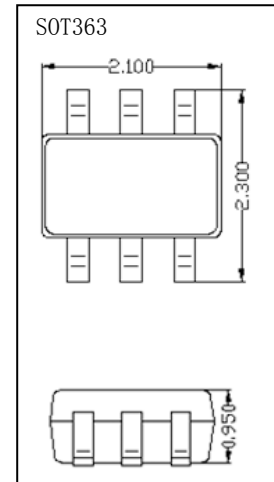


## DATA SHEET

### BAT54ADW~BAT54TW

- ◇ Low Forward Voltage Schottky Rectifier
- ◇ PN Junction Guard Ring for Transient and ESD Protection
- ◇ RoHS compliant / Green EMC
- ◇ Matte Tin (Sn) Lead finish

Device Marking Code	
BAT54ADW	KL6
BAT54CDW	KL7
BAT54SDW	KL8
BAT54BRW	KLB
BAT54TW	KLA



#### MAXIMUM RATINGS (T<sub>a</sub> = 25 °C)

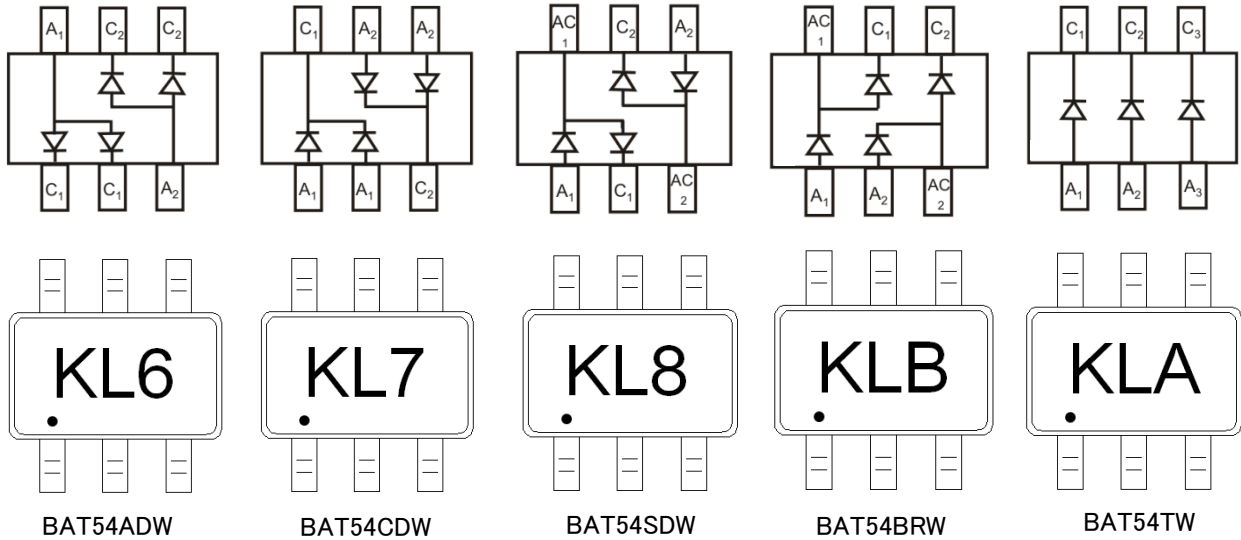
Symbol	Parameter	Value	Unit
V <sub>RRM</sub>	Repetitive Peak Reverse Voltage	30	V
V <sub>RWM</sub>	Peak Working Reverse Voltage		
V <sub>R</sub>	DC Blocking Voltage		
I <sub>O</sub>	Forward Continuous Current	200	mA
I <sub>FRM</sub>	Repetitive Peak Forward Current	300	mA
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current @t=8.3ms	600	
P <sub>D</sub>	Power Dissipation	200	mW
R <sub>θJA</sub>	Thermal Resistance From Junction To Ambient	500	°C/W
T <sub>j</sub>	Junction Temperature	125	°C
T <sub>stg</sub>	Storage Temperature	-55~+150	°C

#### ELECTRICAL CHARACTERISTICS (T<sub>a</sub> = 25 °C)

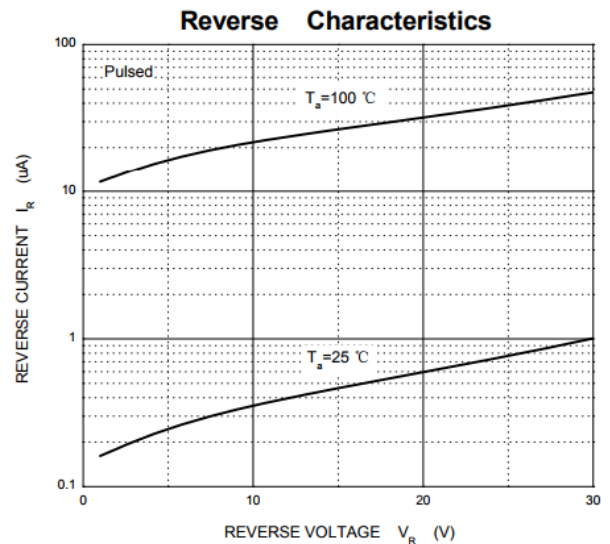
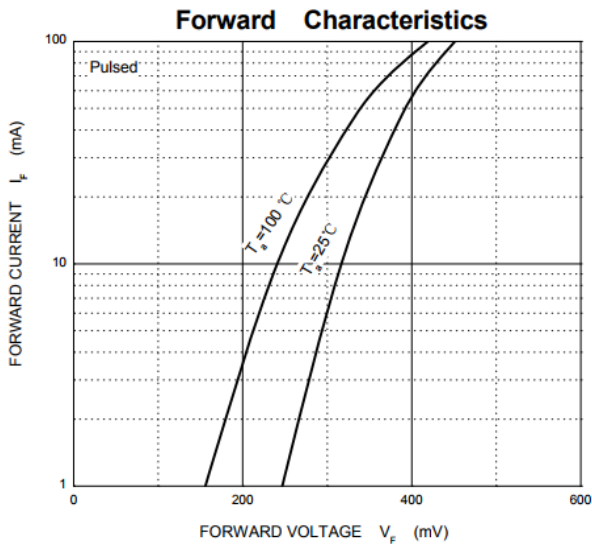
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
V <sub>(BR)</sub>	Reverse voltage	I <sub>R</sub> =100 μA	30			V
I <sub>R</sub>	Reverse current	V <sub>R</sub> =25V			2	μA
V <sub>F</sub>	Forward voltage	I <sub>F</sub> =0.1mA			240	mV
		I <sub>F</sub> =1mA			320	
		I <sub>F</sub> =10mA			400	
		I <sub>F</sub> =30mA			500	
		I <sub>F</sub> =100mA			1000	

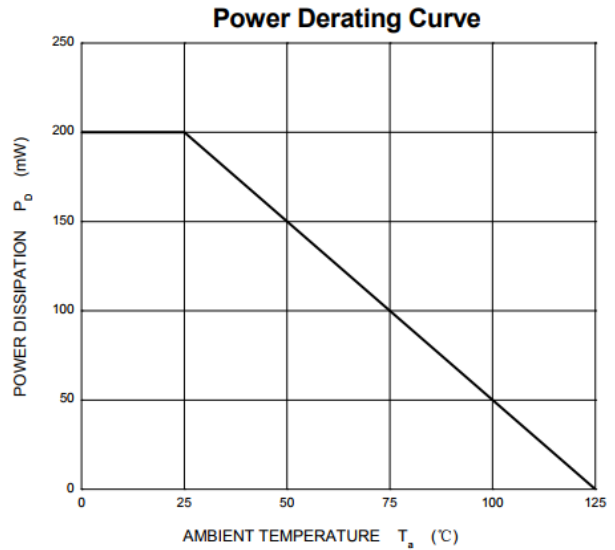
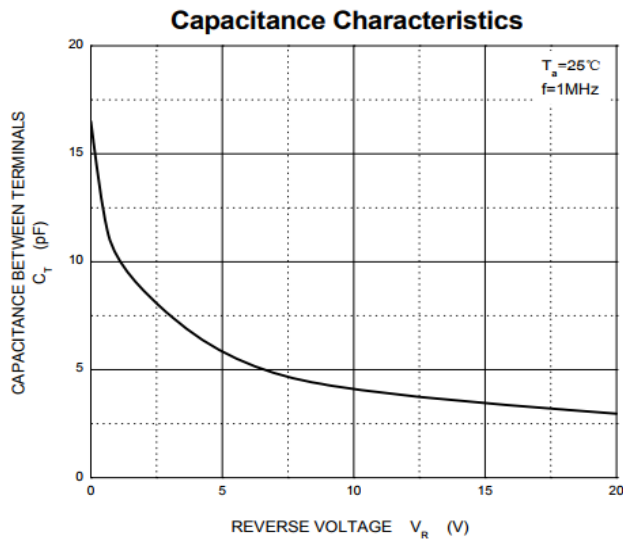
Ctot	Total capacitance	$V_R=1V, f=1MHz$			10	pF
trr	Reverse recovery time	$I_F = I_R = 10mA,$ $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$			5	ns

**INTERNAL STRUCTURE & MARKING DIAGRAM**



**TYPICAL CHARACTERISTICS**





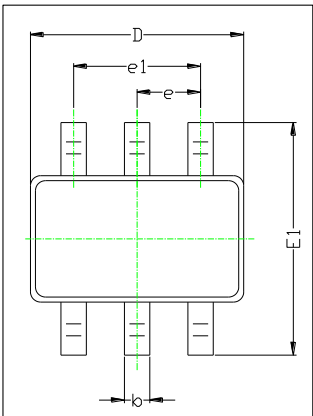
### ORDERING INFORMATION

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BAT54ADW~ BAT54TW	SOT363	Tape & Reel 3000pcs /7" Reel	8mm	4mm	Conductive	

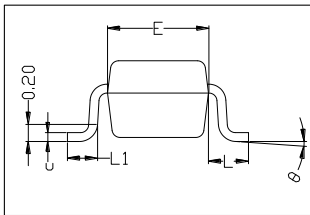
### PACKAGE DIMENSIONS

Package outline : SOT363

TOP VIEW

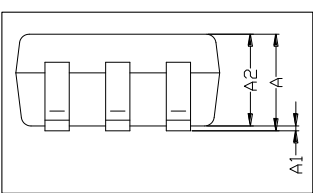


SIDE VIEW

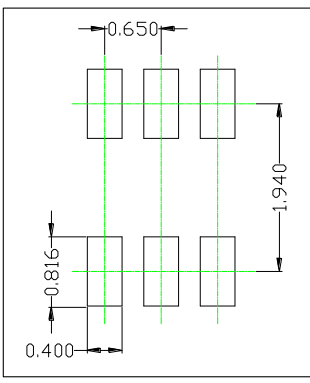


SYMBOL	DIMENSIONS IN MILLIMETER	
	MIN	MAX
A	0.900	1.000
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.100	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.400
e	0.650 TYP.	
e1	1.200	1.400
L	0.525 REF.	
L1	0.260	0.460
θ	0°	8°

FRONT VIEW



SOLDERING PATTERN



Notice:

- Lead plating: Pb free solder
- Lead thickness includes solder plating
- Lead frame: CAC-5
- Other Tolerance:  $\pm 0.05$
- Dimensions are exclusive of Burrs, Mold Flash and Tie Bar extrusions
- Unit: mm