

# SOT-363 Plastic-Encapsulate Diodes

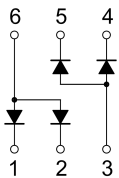
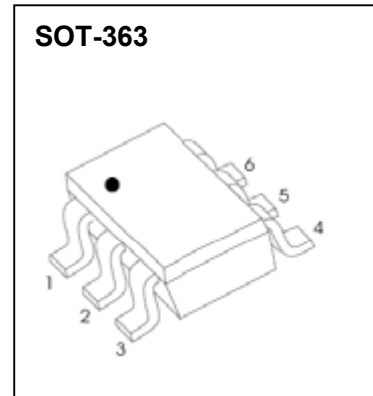
## BAT54ADW /BAT54BRW / BAT54CDW /BAT54SDW /BAT54TW BAT54DW/BAT54JW

SCHOTTKY BARRIER DIODE ARRAYS

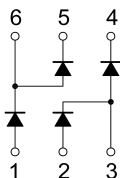
### FEATURES

- Low Forward Voltage Drop
- Fast Switching
- Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection
- Available in Lead Free Version

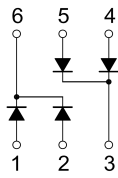
### MARKING:



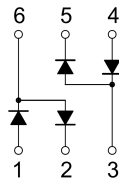
BAT54ADW



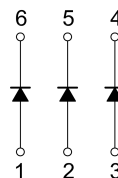
BAT54BRW



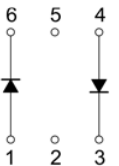
BAT54CDW



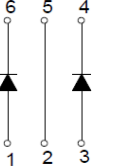
BAT54SDW






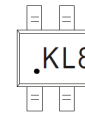

BAT54TW





BAT54DW



BAT54JW

BAT54ADW	BAT54BRW	BAT54CDW	BAT54SDW	BAT54TW
				

BAT54DW	BAT54JW
	

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

Solid dot = Pin1 indicate.

## ELECTRICAL CHARACTERISTICS

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

Symbol	Parameter	Value	Unit
$V_{RRM}$	Repetitive Peak Reverse Voltage	30	V
$V_{RWM}$	Peak Working Reverse Voltage		
$V_R$	DC Blocking Voltage		
$I_O$	Forward Continuous Current	200	mA
$I_{FRM}$	Repetitive Peak Forward Current	300	mA
$I_{FSM}$	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	600	
$P_D$	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	500	$^\circ\text{C/W}$
$T_j$	Junction Temperature	125	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~+150	$^\circ\text{C}$

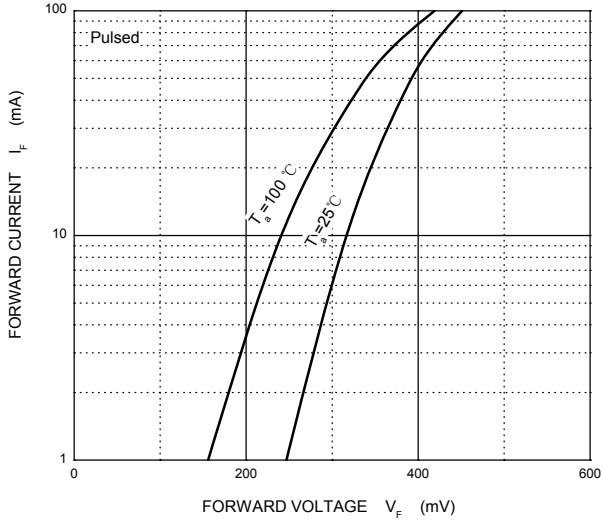
### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ unless otherwise specified )

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	30			V
Reverse current	$I_R$	$V_R=25\text{V}$			2	$\mu\text{A}$
Forward voltage	$V_F$	$I_F=1\text{mA}$			320	mV
		$I_F=10\text{mA}$			400	
		$I_F=30\text{mA}$			500	
		$I_F=100\text{mA}$			1000	
Total capacitance	$C_{tot}$	$V_R=1\text{V}, f=1\text{MHz}$			10	pF
Reverse recovery time	$t_{rr}$	$I_F=I_R=10\text{mA}, I_{tr}=0.1\times I_R, R_L=100\Omega$			5	ns

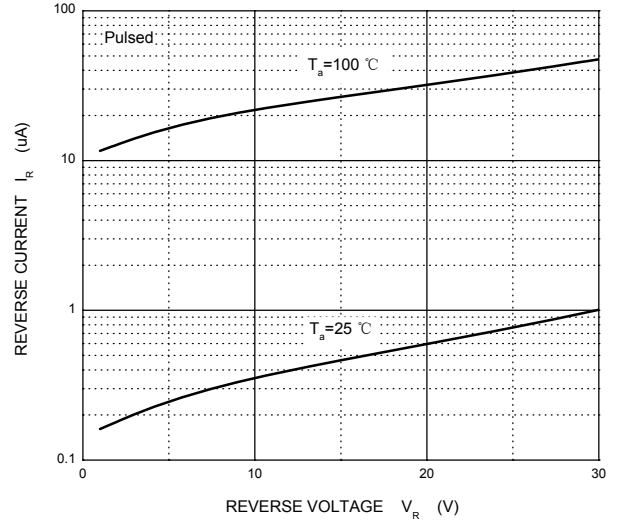


## Typical Characteristics

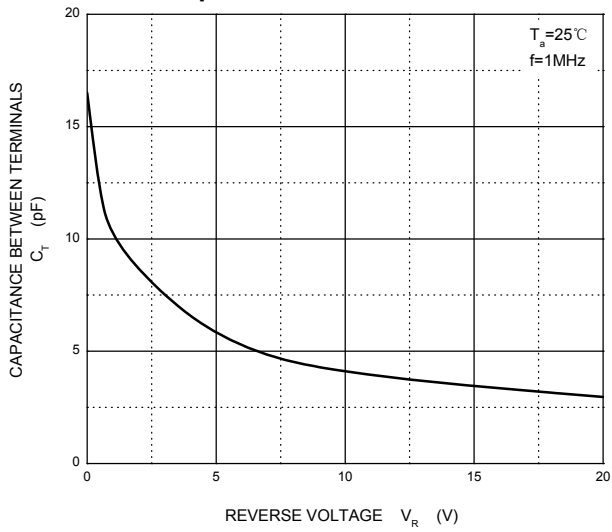
### Forward Characteristics



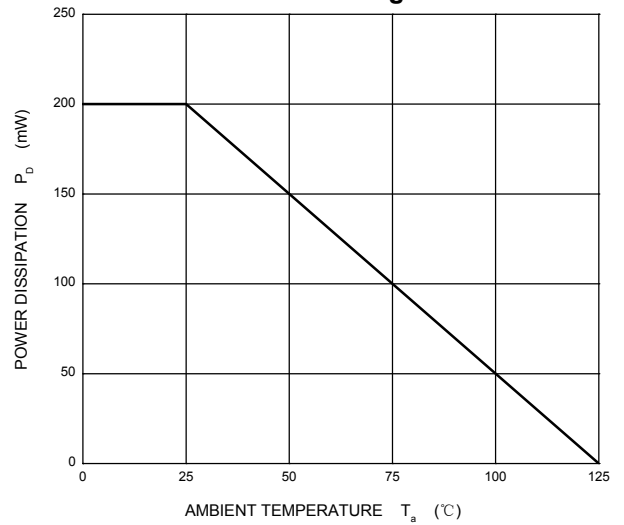
### Reverse Characteristics



### Capacitance Characteristics



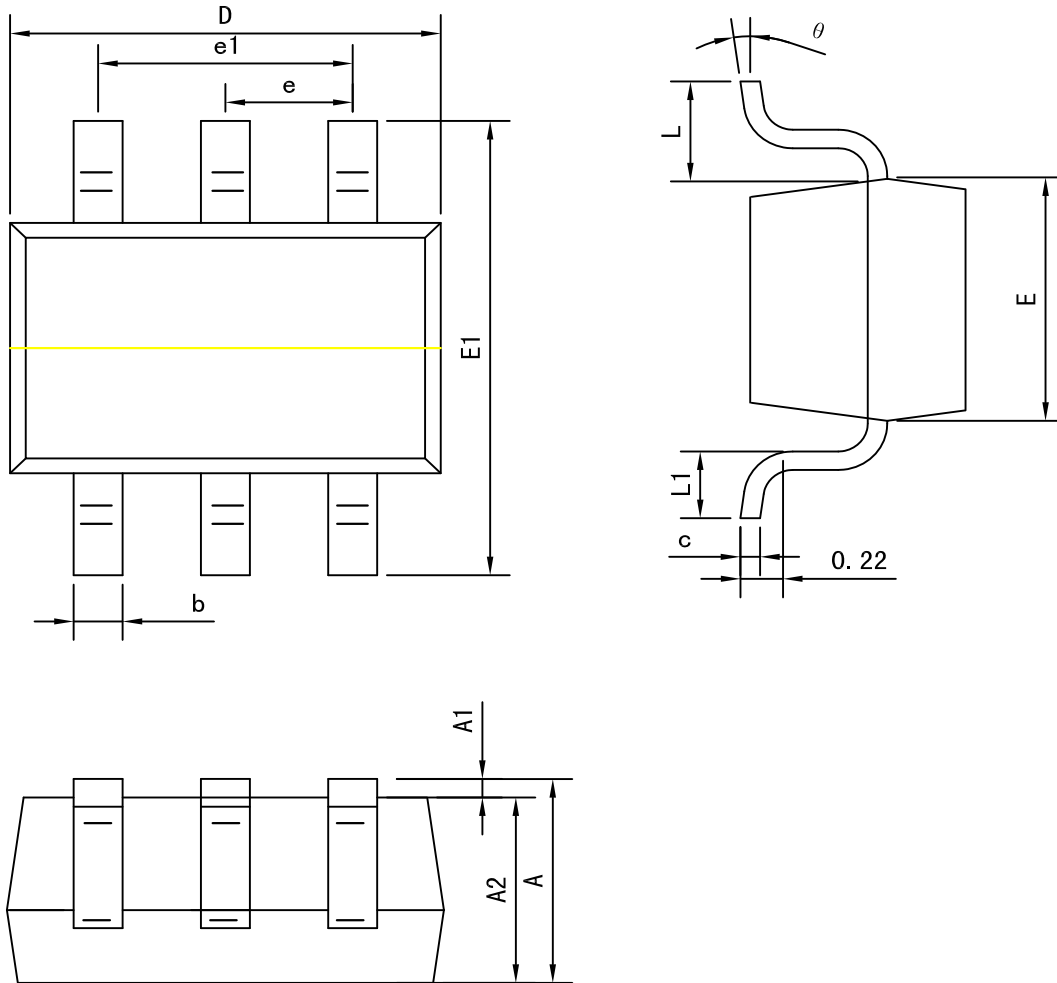
### Power Derating Curve





Package outline dimensions

SOT-363



Symbol	Dimension in Millimeters	
	Min	Max
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP	
e1	1.200	1.400
L	0.525 REF	
L1	0.260	0.460
θ	0°	8°