

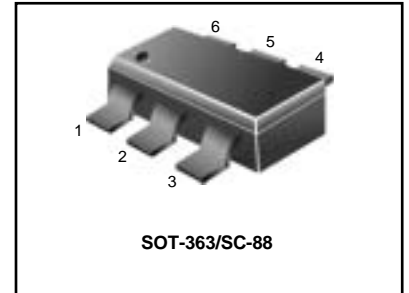


SCHOTTKY BARRIER DIODE ARRAYS

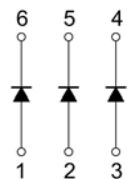
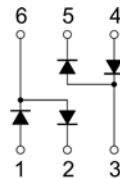
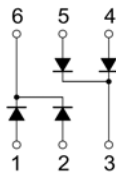
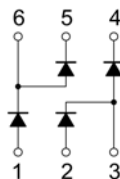
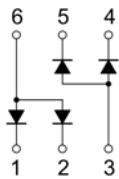


FEATURES

- 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
MARKING: KL6

BAT54BRW
MARKING: KLB

BAT54CDW
MARKING: KL7

BAT54SDW
MARKING: KL8

BAT54TW
MARKING: KLA

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 @ $t \leq 1s$	600	
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	500	$^{\circ}\text{C}/\text{W}$
T_j	Operating Temperature	$-55 \sim +125$	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	$-55 \sim +150$	$^{\circ}\text{C}$

DEVICE CHARACTERISTICS

BAT54xxW

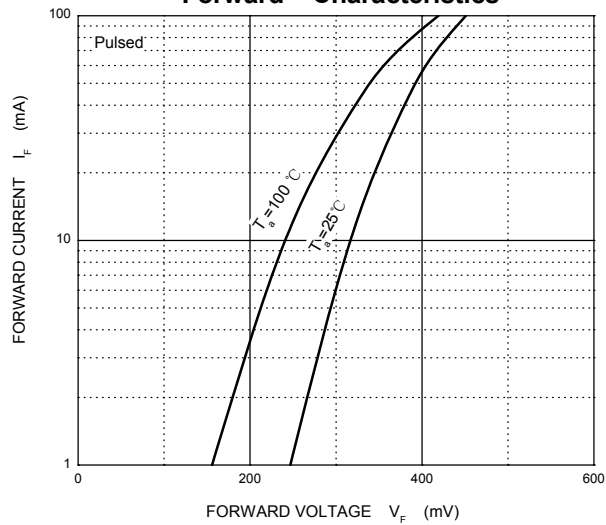
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

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	μA
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}	$I_F=I_R=10\text{mA}, I_{rr}=0.1\times I_R, R_L=100\Omega$			5	ns

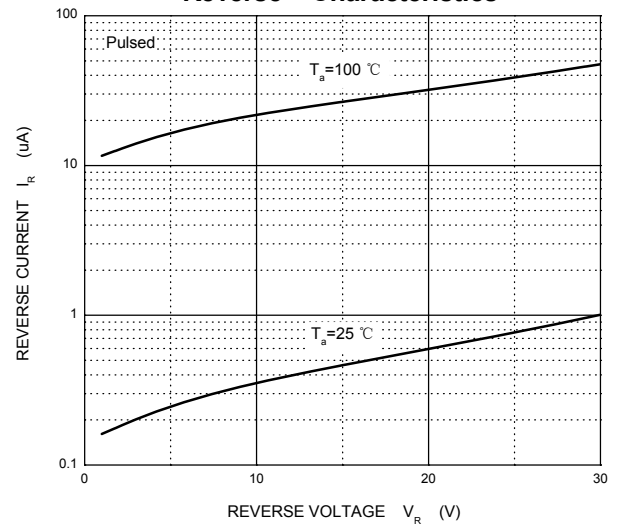
DEVICE CHARACTERISTICS

BAT54xxW

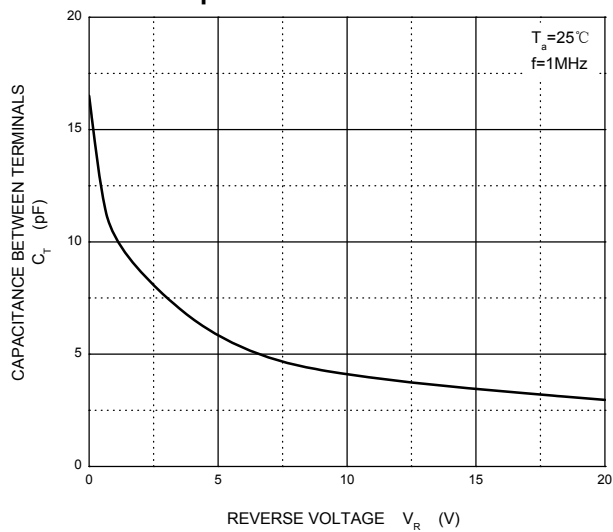
Forward Characteristics



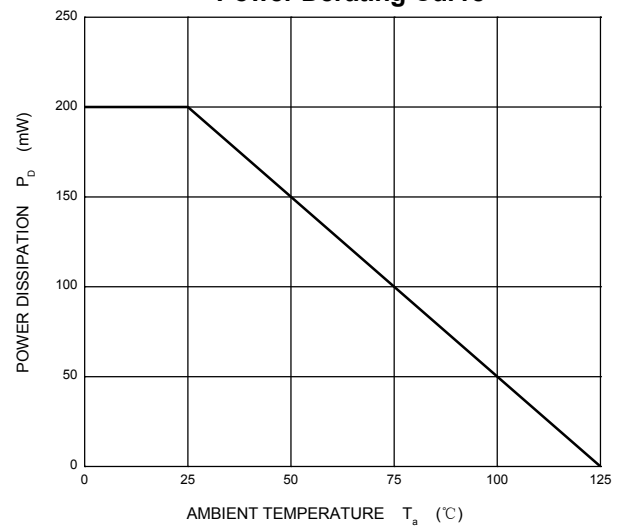
Reverse Characteristics



Capacitance Characteristics



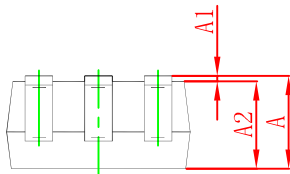
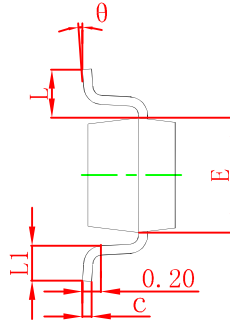
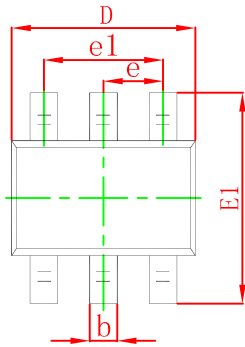
Power Derating Curve



PACKAGE OUTLINE & DIMENSIONS

BAT54xxW

SOT-363 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

SOT-363 Suggested Pad Layout

