DESCRIPTION

The BAT54SDW is available in SC-88 Package

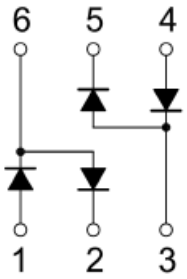
FEATURES

- Low Forward Voltage Drop
- Fast Switching
- Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection
- Available in SC-88 Package

ORDERING INFORMATION

Package Type	Part Number
SC-88	BAT54SDW
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



ABSOLUTE MAXIMUM RATINGS

T_A= 25°C, unless otherwise noted

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

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

T_A= 25°C, unless otherwise noted

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Voltage	$V_{(BR)R}$	I_R=100μA	30	-	-	V
Reverse Current	I_R	V_R=25V	-	-	2	μA
Forward Voltage	V_F	I_F=1mA	-	-	320	mV
		I_F=10mA	-	-	400	
		I_F=30mA	-	-	500	
		I_F=100mA	-	-	1000	
Total Capacitance	C_{tot}	V_R=0V, f=1MHz	-	-	10	pF
Reverse Recovery Time	t_{rr}	I_F=I_R=10mA, I_{rr}=0.1 x I_R, R_L=100Ω	-	-	5	ns

TYPICAL CHARACTERISTICS

Figure 1. Forward Characteristics

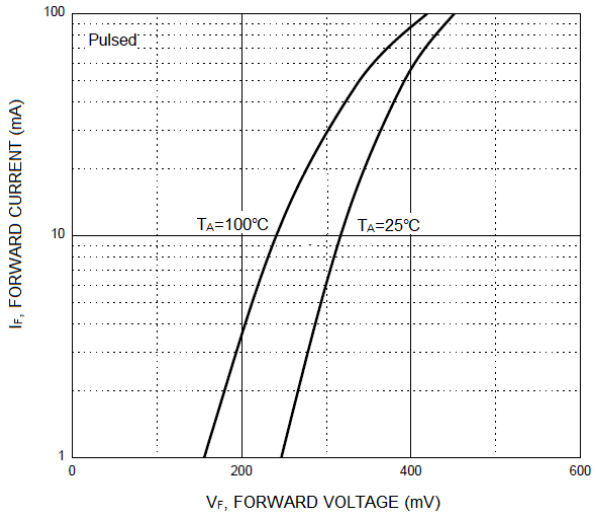


Figure 2. Reverse Characteristics

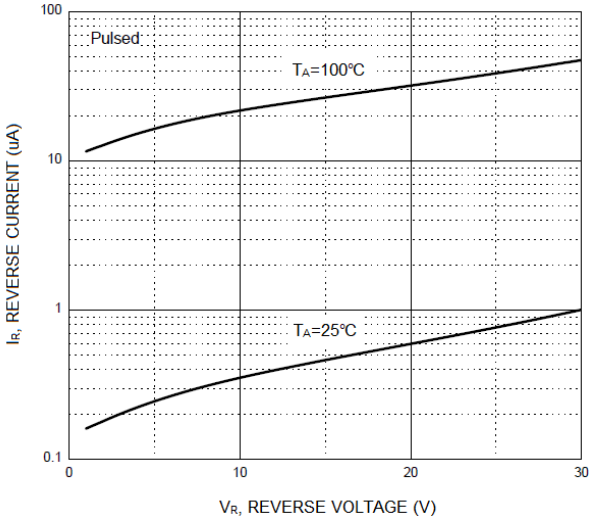


Figure 3. Capacitance Characteristics

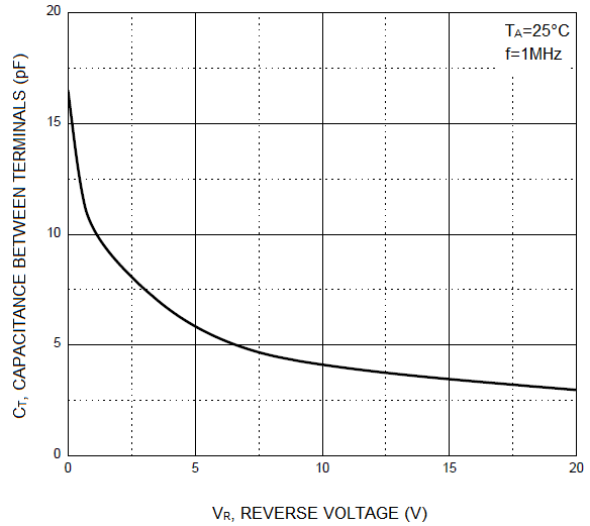
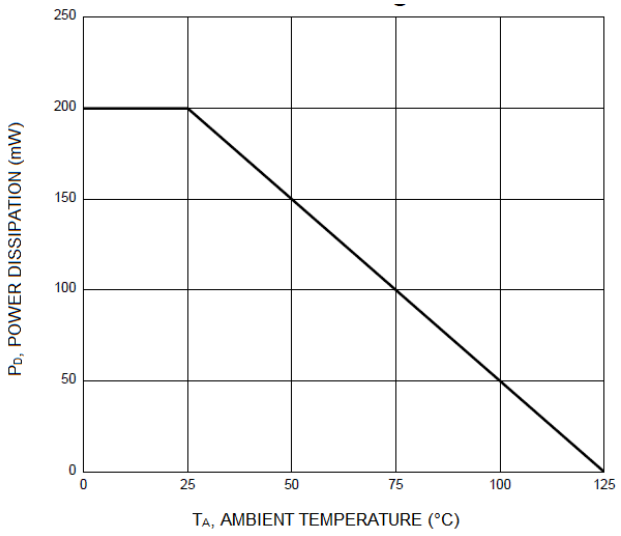
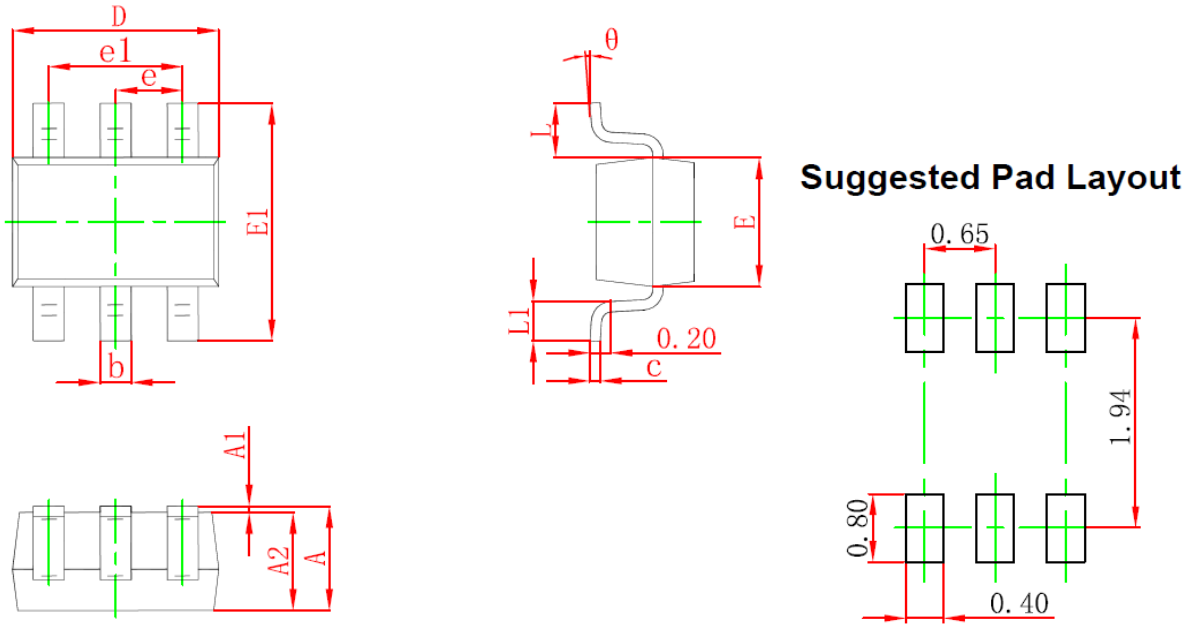


Figure 4. Power Derating Curve



PACKAGE INFORMATION

Dimension in SC-88 (Unit: mm)



Symbol	Millimeters		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°

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