



# THE DATASHEET OF BAT54SDW-TP





Micro Commercial Components



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## BAT54TW/ADW/ CDW/SDW/BRW

### Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"
- Fast Switching and Low Forward Voltage Drop
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection
- Available in Lead Free Version
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

### Maximum Ratings

Continuous Reverse Voltage	$V_R$	30V
Forward Continuous Current	$I_F$	200mA
Repetitive Peak Forward Current	$I_{FRM}$	300mA
Peak Forward Current $t < 1s$	$I_{FSM}$	600mA
Power Dissipation @ $T_A = 25^\circ C$	$P_D$	200mW
Thermal Resistance , Junction to Ambient	$R_{\theta JA}$	$625^\circ C/W$
Storage Temperature Range	$T_{stg}$	$-65^\circ C$ to $125^\circ C$
Operating Temperature Range	$T_j$	$-65^\circ C$ to $125^\circ C$

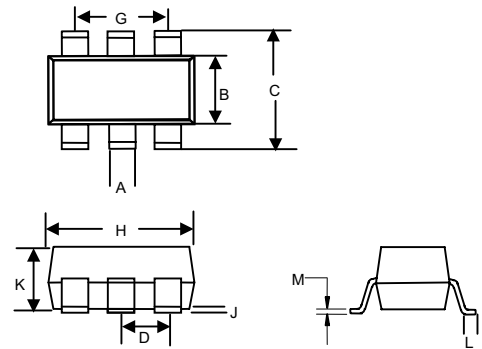
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Ratings	Symbol	Max.	Notes
Forward Voltage at $I_F = 0.1mA$ $I_F = 1mA$ $I_F = 10mA$ $I_F = 30mA$ $I_F = 100mA$	$V_F$	240mV 320mV 400mV 500mV 1000mV	Note 2
Reverse Current	$I_R$	$2.0\mu A$	$V_R = 25V$
Reverse Breakdown Voltage	$V_{(BR)}$	$>30V$	
Capacitance	$C_J$	10pF	Measured at 1.0MHz, $V_R=1.0V$
Reverse Recovery Time	$t_{rr}$	5.0nS	$I_F=I_R=10mA$ ; $I_{REC}=1mA, R_L=100\Omega$

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.  
2.Short duration test pulse used to minimize self-heating effect

## 200mWatt, 30Volt Schottky Barrier Diode

### SOT-363



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	0.006	0.014	0.15	0.35	
B	0.045	0.053	1.15	1.35	
C	0.085	0.096	2.15	2.45	
D	0.026 Nominal		0.65 Nominal		
G	0.047	0.055	1.20	1.40	
H	0.071	0.087	1.80	2.20	
J	---	0.004	---	0.10	
K	0.035	0.043	0.90	1.10	
L	0.010	0.018	0.26	0.46	
M	0.003	0.006	0.08	0.15	

**BAT54TW/ADW/CDW/SDW/BRW**

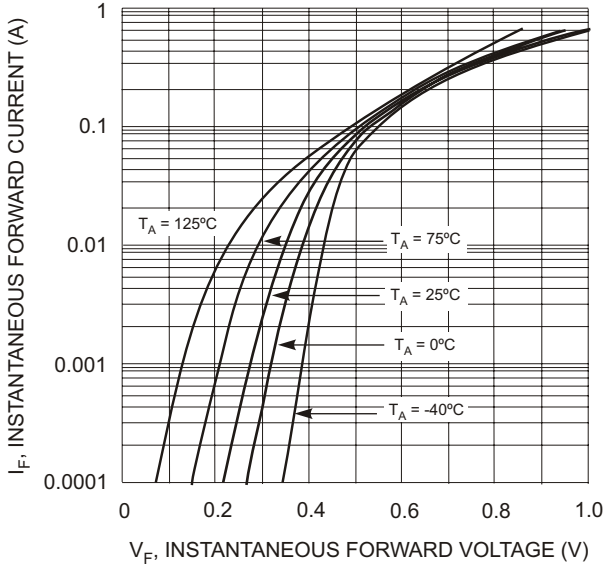


Fig. 1 Forward Characteristics

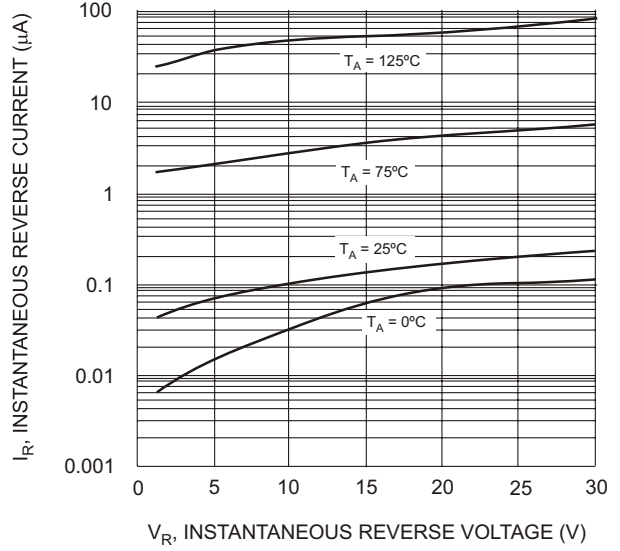


Fig. 2 Typical Reverse Characteristics

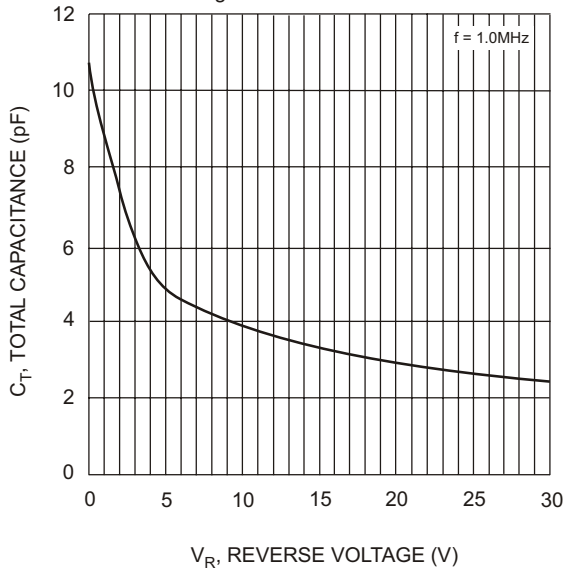


Fig. 3 Typical Capacitance vs. Reverse Voltage

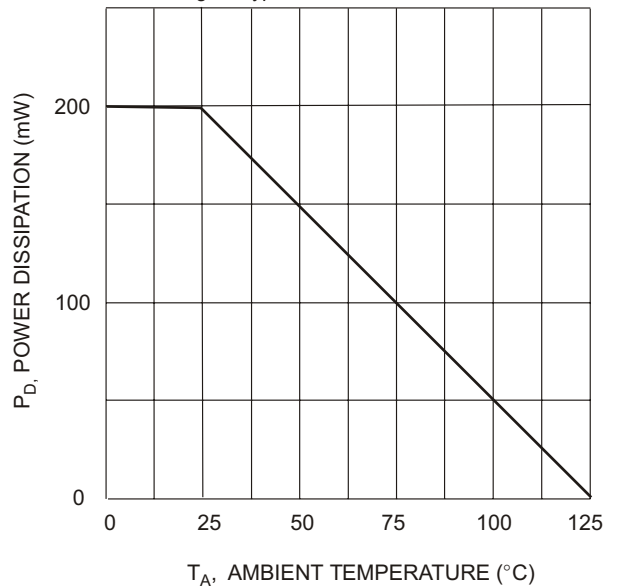
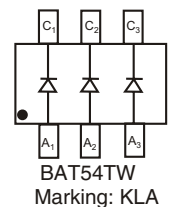
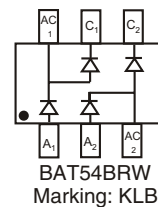
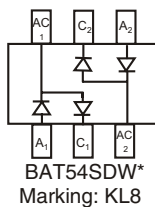
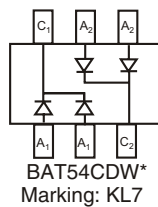
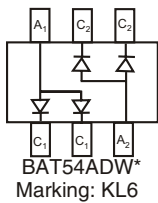


Fig. 4 Power Derating Curve



\*Symmetrical configuration, no orientation indicator.



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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