



Micro Commercial Components



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°C/W        |
| Storage Temperature Range                | $T_{stg}$       | -65°C to 125°C |
| Operating Temperature Range              | $T_j$           | -65°C to 125°C |

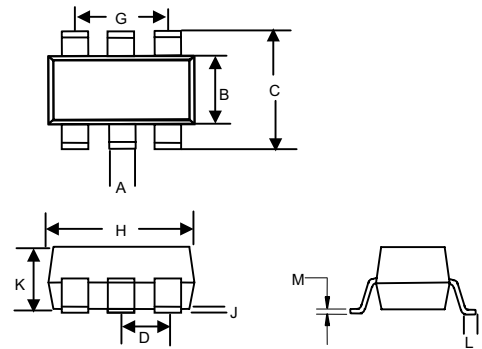
## Electrical Characteristics @ 25°C Unless Otherwise Specified

| Ratings                                                                                             | Symbol     | Max.                                       | Notes                                            |
|-----------------------------------------------------------------------------------------------------|------------|--------------------------------------------|--------------------------------------------------|
| Forward Voltage at<br>$I_F = 0.1mA$<br>$I_F = 1mA$<br>$I_F = 10mA$<br>$I_F = 30mA$<br>$I_F = 100mA$ | $V_F$      | 240mV<br>320mV<br>400mV<br>500mV<br>1000mV | Note 2                                           |
| Reverse Current                                                                                     | $I_R$      | 2.0µA                                      | $V_R = 25V$                                      |
| 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                                      | $I_F=I_R=10mA$ ;<br>$I_{REC}=1mA, R_L=100\Omega$ |

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 |      |

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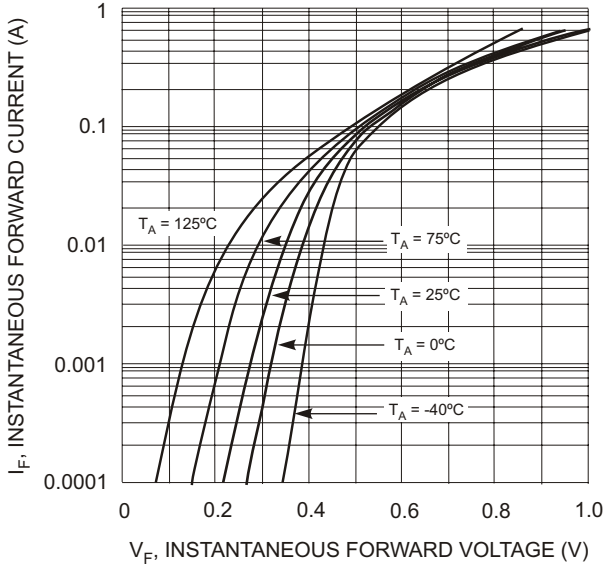


Fig. 1 Forward Characteristics

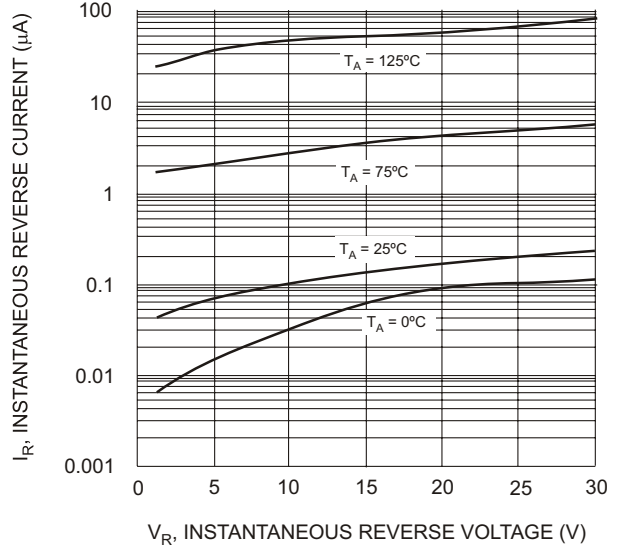


Fig. 2 Typical Reverse Characteristics

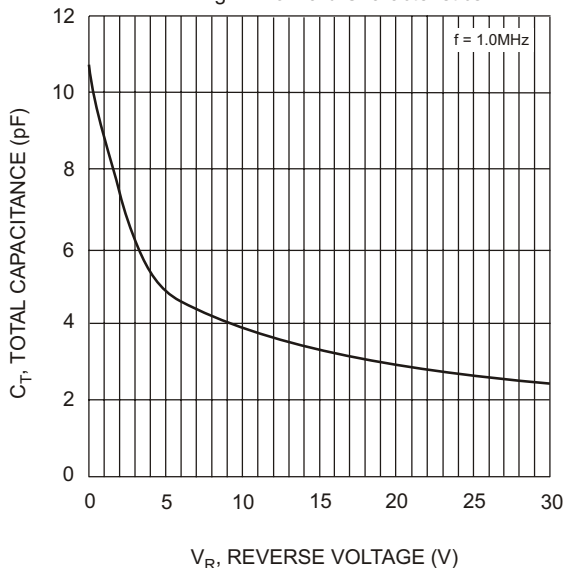


Fig. 3 Typical Capacitance vs. Reverse Voltage

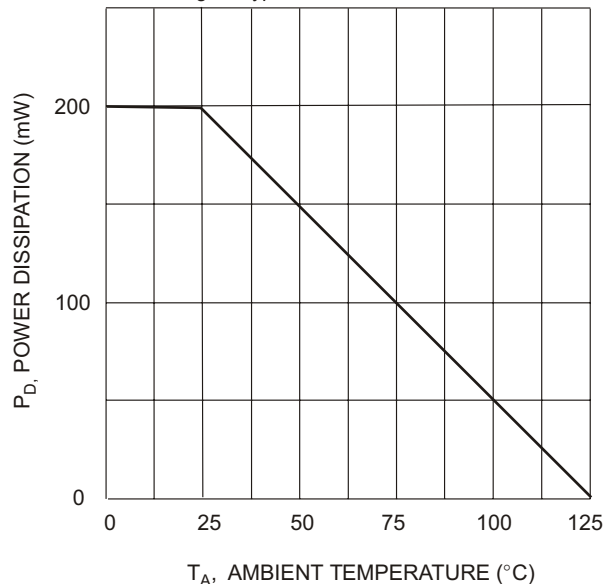
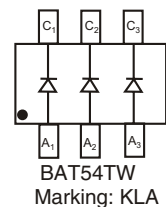
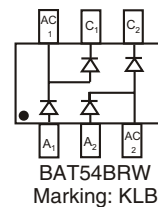
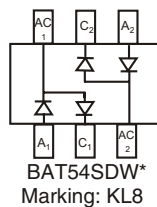
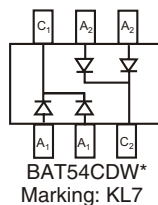
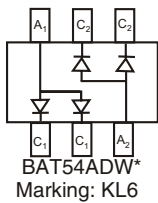


Fig. 4 Power Derating Curve



\*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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- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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