



# WILLAS



## SOT-363 Plastic-Encapsulate Diodes

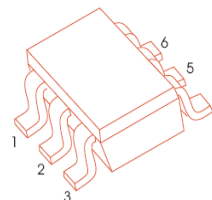
### BAT54xxW

#### SCHOTTKY BARRIER DIODE ARRAYS

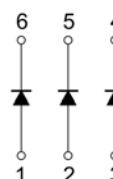
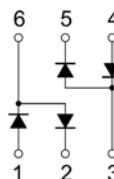
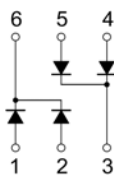
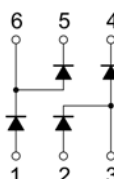
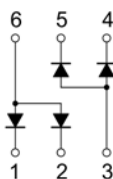
#### FEATURES

- Low Forward Voltage Drop
- Fast Switching
- Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection
- Available in Lead Free Version
- **Pb-Free package is available**  
RoHS product for packing code suffix "G"  
Halogen free product for packing code suffix "H"
- **Moisture Sensitivity Level 1**

SOT-363



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



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## SOT-363 Plastic-Encapsulate Diodes

**BAT54xxW**

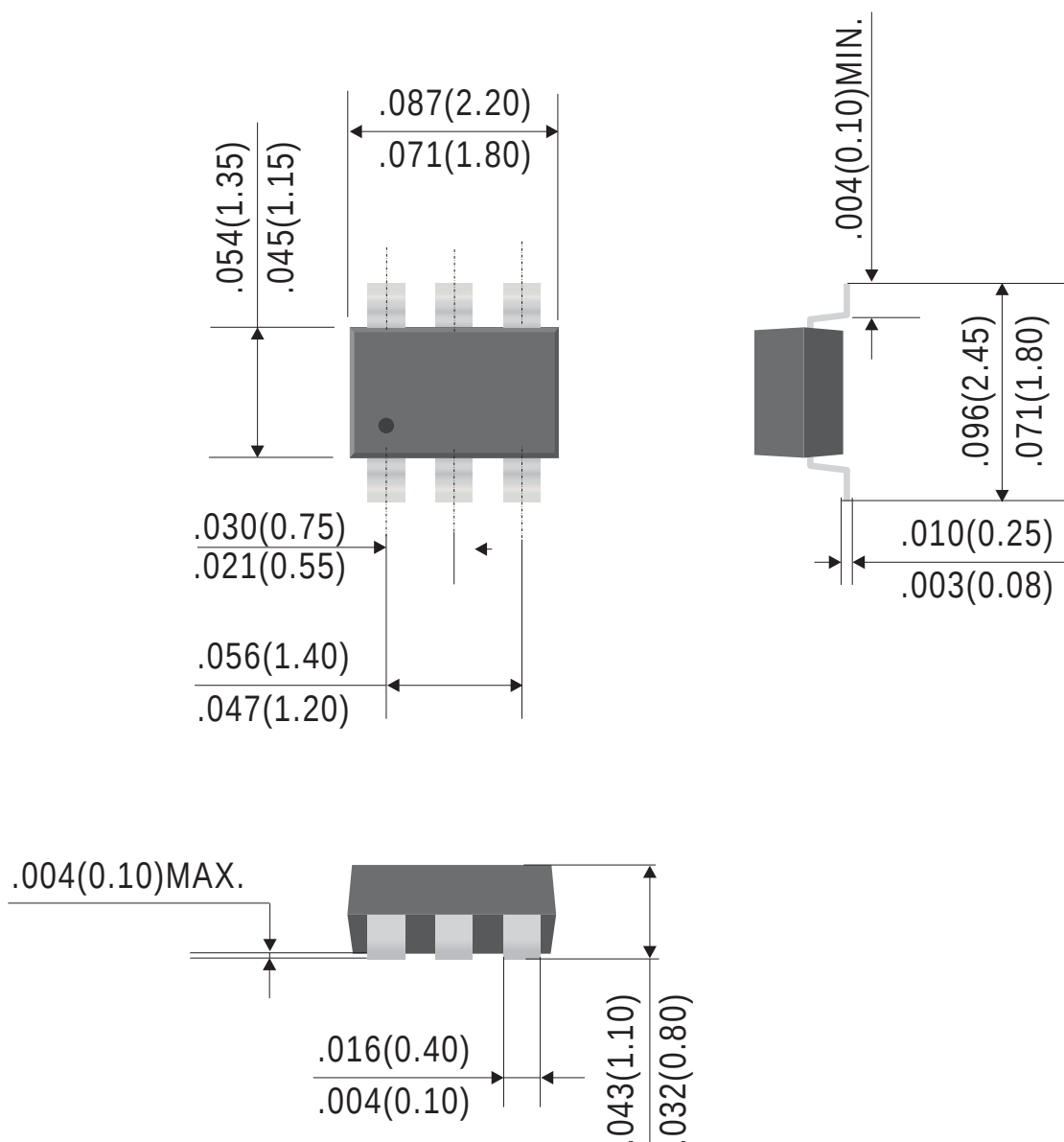
### ELECTRICAL CHARACTERISTICS( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

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



# Outline Drawing

# SOT-363



Dimensions in inches and (millimeters)

**Ordering Information:**

| Device PN                                          | Packing                |
|----------------------------------------------------|------------------------|
| Part Number -T <sup>(1)</sup> G <sup>(2)</sup> -WS | Tape&Reel: 3 Kpcs/Reel |

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

**\*\*\*Disclaimer\*\*\***

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