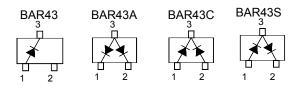
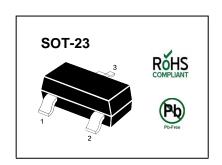


# **SCHOTTKY BARRIER DIODE**



BAR43 Marking Code: RD BAR43A Marking Code: RE BAR43C Marking Code: RF BAR43S Marking Code: RH



Absolute Maximum Ratings (T<sub>a</sub> = 25 °C)

| Parameter  | Symbol             | Value         | Unit |
|--|--------------------|---------------|------|
| Maximum Repetitive Reverse Voltage                     | $V_{RRM}$          | 30            | V    |
| Average Rectified Forward Current                      | I <sub>F(AV)</sub> | 200           | mA   |
| Non-repetitive Peak Forward Surge Current at (t = 1 s) | I <sub>FSM</sub>   | 750           | mA   |
| Power Dissipation                                      | P <sub>tot</sub>   | 290           | mW   |
| Thermal Resistance, Junction to Ambient                | $R_{\theta JA}$    | 430           | °C/W |
| Operating Junction Temperature                         | T <sub>J</sub>     | 150           | °C   |
| Storage Temperature Range                              | T <sub>S</sub>     | - 55 to + 150 | °C   |

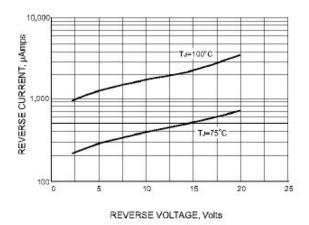
### Characteristics at T<sub>a</sub> = 25 °C

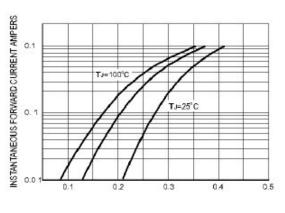
| Parameter   | Symbol          | Min.           | Max.                | Unit |
|---|-----------------|----------------|---------------------|------|
| Reverse Breakdown Voltage at I <sub>R</sub> = 100 μA                                | $V_{(BR)R}$     | 30             | -                   | V    |
| Reverse Current at V <sub>R</sub> = 25 V  | I <sub>R</sub>  | -              | 500                 | nA   |
| Forward Voltage at $I_F = 2$ mA at $I_F = 15$ mA at $I_F = 100$ mA                  | V <sub>F</sub>  | 0.26<br>-<br>- | 0.33<br>0.45<br>0.8 | V    |
| Reverse Recovery Time at $I_F = I_R = 10$ mA, $I_{RR} = 1$ mA, $R_L = 100$ $\Omega$ | t <sub>rr</sub> | -              | 5                   | ns   |

0755-23619906 www.jhgsz.com Rev.01 1 / 4

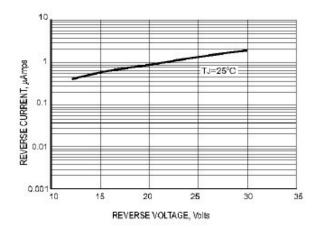


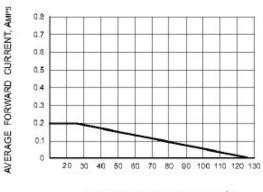
#### **Typical Characteristics**











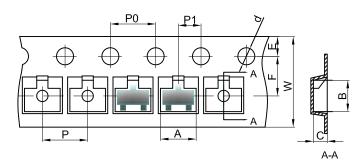
AMBIENT LEAD TEMPERATURE, °C

0755-23619906 www.jhgsz.com Rev.01 2 / 4



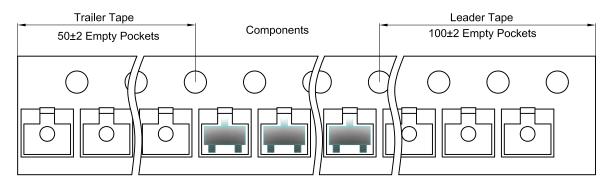
# **SOT-23 Tape and Reel**

# SOT-23 Embossed Carrier Tape

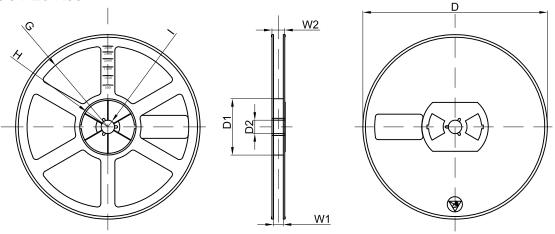


| Dimensions are in millimeter |      |      |      |       |      |      |      |      |      |      |
|------------------------------|------|------|------|-------|------|------|------|------|------|------|
| Pkg type                     | Α    | В    | С    | d     | E    | F    | P0   | Р    | P1   | W    |
| SOT-23                       | 3.15 | 2.77 | 1.22 | Ø1.50 | 1.75 | 3.50 | 4.00 | 4.00 | 2.00 | 8.00 |

#### SOT-23 Tape Leader and Trailer





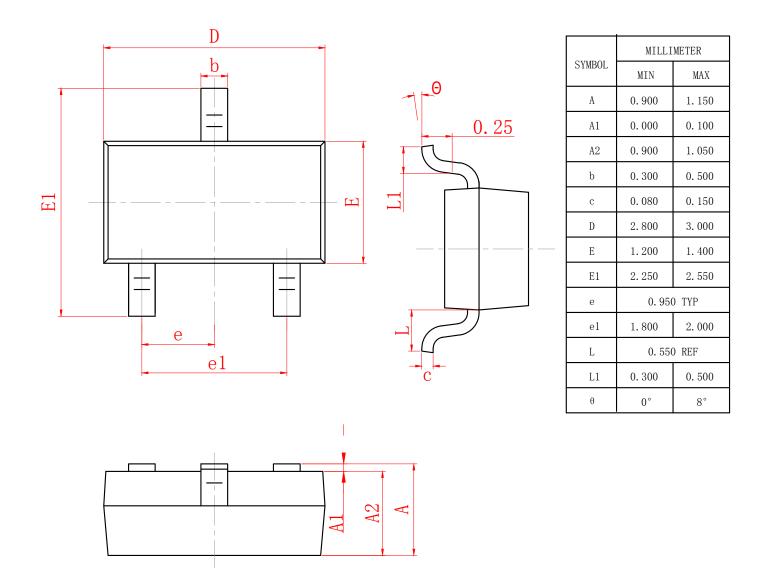


| Dimensions are in millimeter |         |       |       |        |        |       |      |       |
|------------------------------|---------|-------|-------|--------|--------|-------|------|-------|
| Reel Option                  | D       | D1    | D2    | G      | Н      | I     | W1   | W2    |
| 7"Dia                        | Ø178.00 | 54.40 | 13.00 | R78.00 | R25.60 | R6.50 | 9.50 | 12.30 |

| REEL     | Reel Size | Box        | Box Size(mm) | Carton      | Carton Size(mm) | G.W.(kg) |
|----------|-----------|------------|--------------|-------------|-----------------|----------|
| 3000 pcs | 7 inch    | 45,000 pcs | 203×203×195  | 180,000 pcs | 438×438×220     |          |

0755-23619906 www.jhgsz.com Rev.01 3 / 4





### **DISCLAIMER**

JHG PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with JHG products. You are solely responsible for (1)selecting the appropriate JHG products for your application;

(2)designing, validating and testing your application;

(3)ensuring your application meets applicable standards, and any other safety, security, or other requirements.

These resources are subject to change without notice. JHG grants you permission to use these resources only for development of an application that uses the JHG products described in the resource. Other reproduction and display of these resources are prohibited. No license is granted to any other JHG intellectual property right or to any third party intellectual property right. JHG disclaims responsibility for, and you will fully indemnify JHG and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

0755-23619906 www.jhgsz.com Rev.01 4 / 4