

Schottky Barrier diode

**BAR43/A/C/S**

**FEATURES**

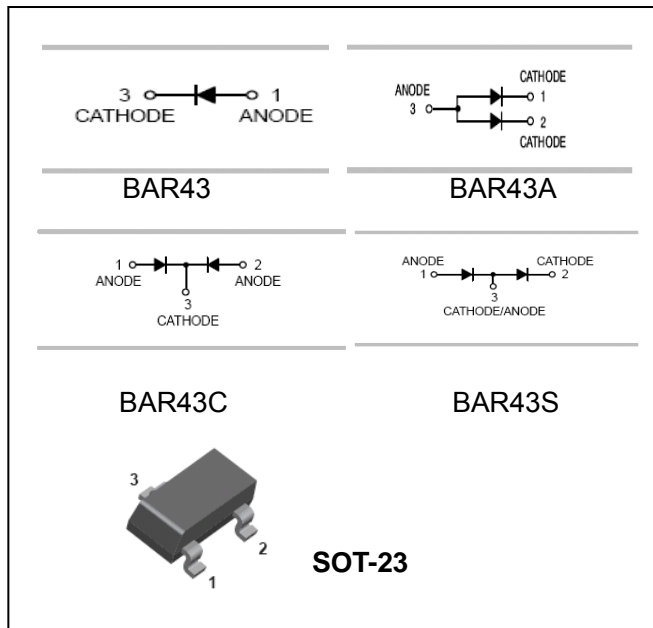
- Extremely Fast switching speed.
- Low forward voltage.
- Power dissipation  $P_d=200mW$ .
- Pb-Free package is available.



**APPLICATIONS**

- Fast switching speed diode

**ORDERING INFORMATION**



| Type No. | Marking | Package Code |
|----------|---------|--------------|
| BAR43    | D95     | SOT-23       |
| BAR43A   | DB1     | SOT-23       |
| BAR43C   | DB2     | SOT-23       |
| BAR43S   | DA5     | SOT-23       |

**MAXIMUM RATING @ Ta=25°C unless otherwise specified**

| Parameter                                   | Symbol          | Limits      | Unit |
|---------------------------------------------|-----------------|-------------|------|
| Peak Repetitive Peak reverse voltage        | $V_{RRM}$       | 30          | V    |
| Working Peak Reverse Voltage                | $V_{RWM}$       |             |      |
| DC Reverse Voltage                          | $V_R$           |             |      |
| Forward Continuous Current                  | $I_F$           | 200         | mA   |
| Non-repetitive peak forward surge Current   | $I_{FSM}$       | 750         | mA   |
| Power Dissipation                           | $P_d$           | 290         | mW   |
| Thermal resistance, Junction to temperature | $R_{\theta JA}$ | 430         | °C/W |
| Storage temperature                         | $T_{STG}$       | -55 to +150 | °C   |



Schottky Barrier diode

**BAR43/A/C/S**

**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

| Parameter                 | Symbol     | Min. | Typ. | Max.       | Unit               | Conditions                                       |
|---------------------------|------------|------|------|------------|--------------------|--------------------------------------------------|
| Reverse Breakdown Voltage | $V_{(BR)}$ | 30   |      |            | V                  | $I_R=100\mu A$                                   |
| Forward voltage           | $V_{F1}$   | 0.26 |      | 0.33       | V                  | $I_F=2.0mA$                                      |
|                           | $V_{F2}$   |      |      | 0.45       | V                  | $I_F=15mA$                                       |
|                           | $V_{F3}$   |      |      | 1.0        | V                  | $I_F=100mA$                                      |
| Reverse current           | $I_R$      |      |      | 0.5<br>100 | $\mu A$<br>$\mu A$ | $V_R=25V$<br>$V_R=25V, T_A=100^\circ C$          |
| Diode Capacitance         | $C_D$      |      |      | 10         | pF                 | $V_R=1V, f=1MHz$                                 |
| Reverse Recovery Time     | $t_{rr}$   |      |      | 5          | ns                 | $I_F=I_R=10mA$<br>$I_{rr}=0.1I_R, R_L=100\Omega$ |

**PACKAGE OUTLINE**

Plastic surface mounted package

SOT-23

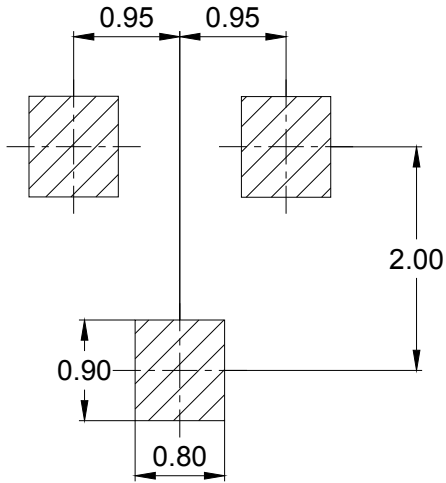
| SOT-23               |             |      |
|----------------------|-------------|------|
| Dim                  | Min         | Max  |
| A                    | 2.70        | 3.10 |
| B                    | 1.10        | 1.50 |
| C                    | 1.0 Typical |      |
| D                    | 0.4 Typical |      |
| E                    | 0.35        | 0.48 |
| G                    | 1.80        | 2.00 |
| H                    | 0.02        | 0.1  |
| J                    | 0.1 Typical |      |
| K                    | 2.20        | 2.60 |
| All Dimensions in mm |             |      |



Schottky Barrier diode

**BAR43/A/C/S**

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

| Device      | Package | Shipping       |
|-------------|---------|----------------|
| BAR43/A/C/S | SOT-23  | 3000/Tape&Reel |