

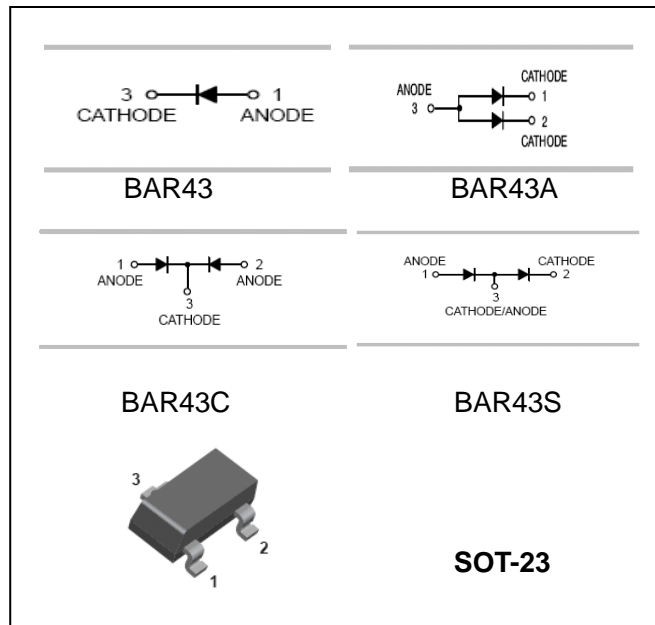
Schottky Barrier Diode

BAR43/A/C/S

FEATURES

- Extremely Fast switching speed.
- Low forward voltage.
- Power dissipation $P_d=200\text{mW}$.

HF



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 @ $T_a=25^\circ\text{C}$ 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 $t=10\text{ms}$ | I_{FSM} | 750 | mA |
| Power Dissipation | P_d | 290 | mW |
| Thermal resistance, Junction to temperature | $R_{\theta JA}$ | 430 | $^\circ\text{C}/\text{W}$ |
| Storage temperature | T_{STG} | -55 to +150 | $^\circ\text{C}$ |

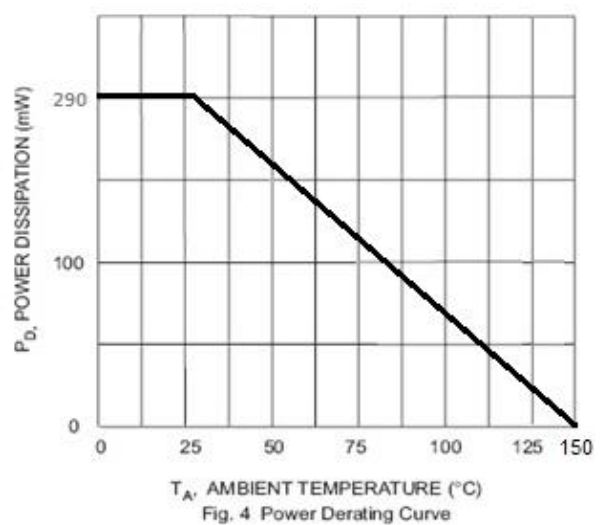
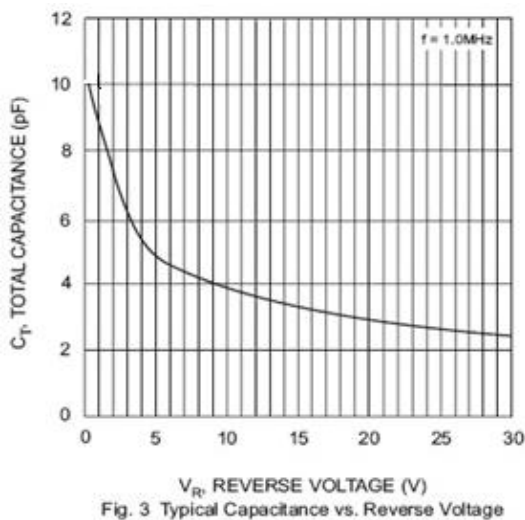
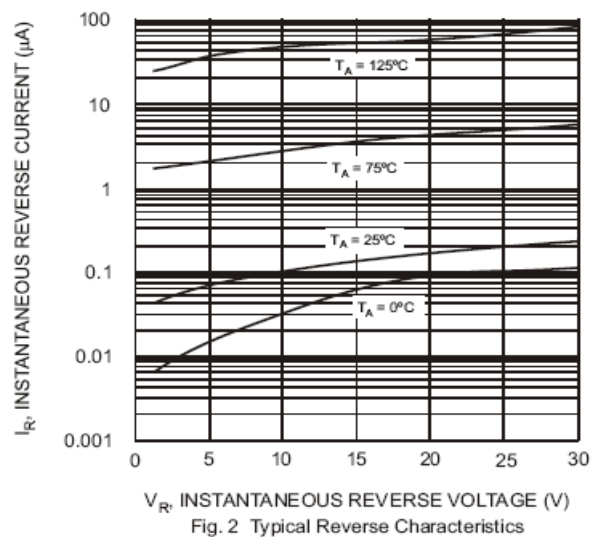
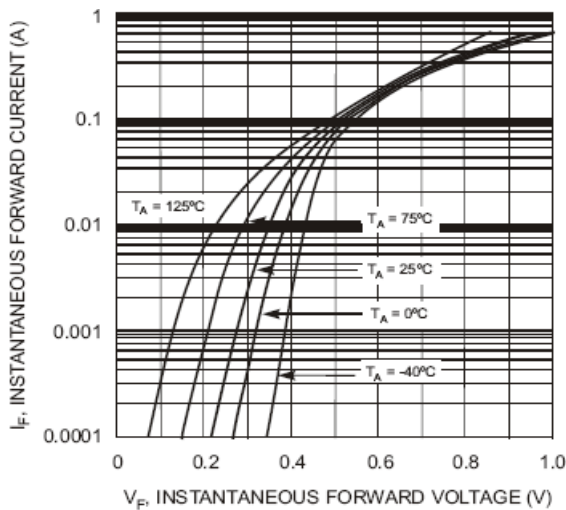
Schottky Barrier Diode

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 | μA | $V_R=25V$ |
| | | | | 100 | μA | $V_R=25V, T_A=100^\circ C$ |
| Diode Capacitance | C_D | | | 10 | pF | $V_R=1V, f=1MHz$ |
| Reverse Recovery Time | t_{rr} | | | 5 | ns | $I_F=I_R=10mA$ $I_{rr}=0.1I_R, R_L=100\Omega$ |

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



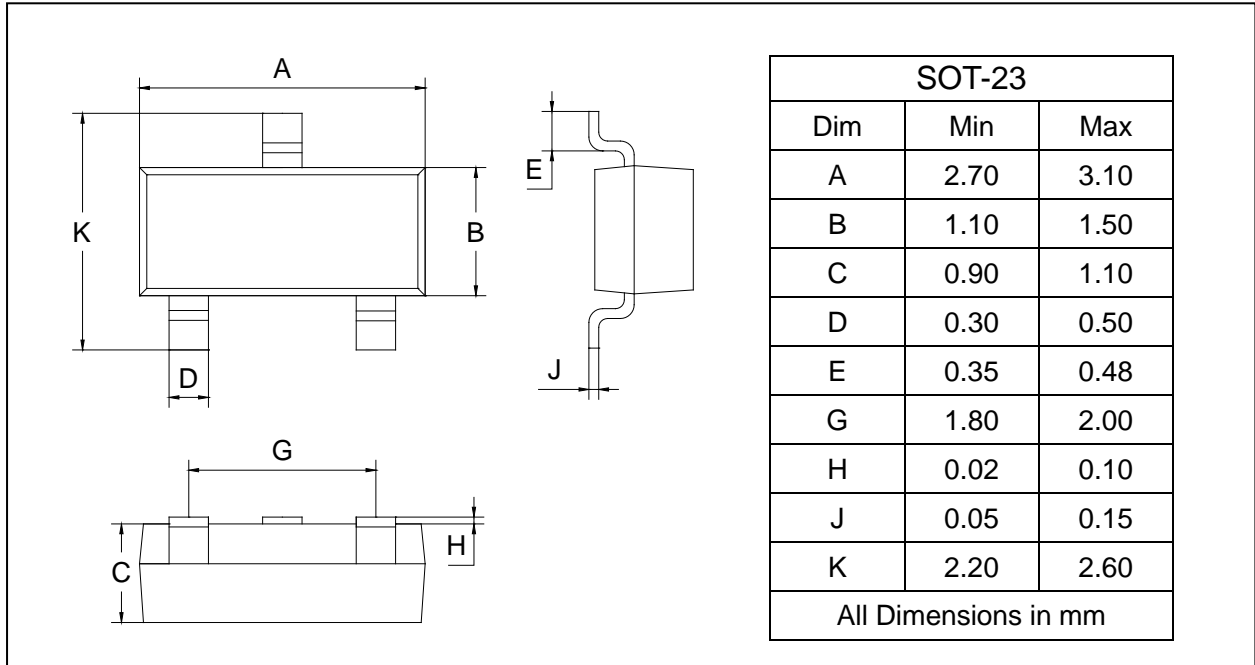
Schottky Barrier Diode

BAR43/A/C/S

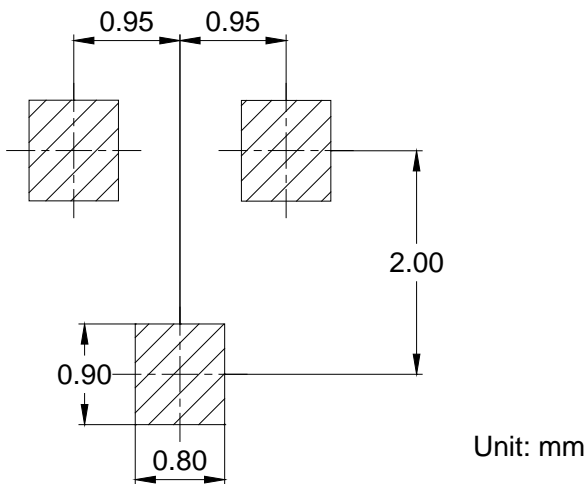
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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