

SCHOTTKY BARRIER DIODE

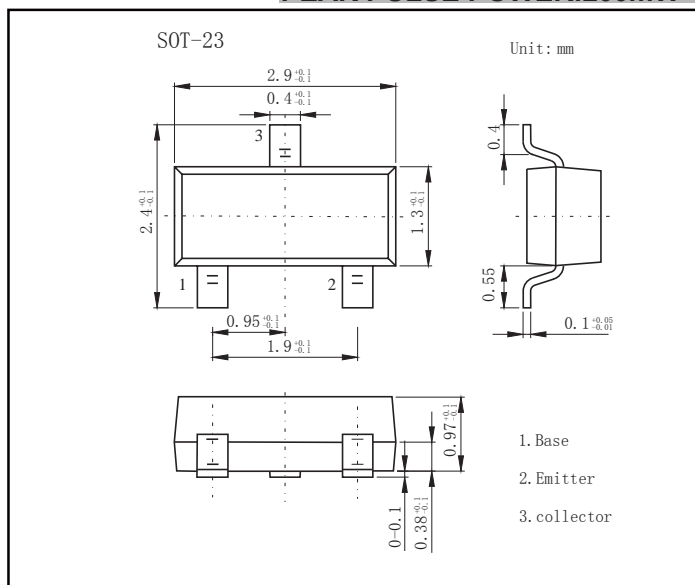
VOLTAGE RANGE: 40V
PEAK PULSE POWER: 200mW

FEATURES

- Low Forward Voltage
- Fast Switching

MECHANICAL DATA

- Case: SOT-23 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified

| Parameter | Symbol | Limit | Unit |
|--|-----------------|----------|------|
| Peak repetitive peak reverse voltage | V_{RRM} | 40 | V |
| Working peak reverse voltage | V_{RWM} | | |
| DC blocking voltage | V_R | | |
| Forward continuous current | I_{FM} | 200 | mA |
| Power dissipation | P_D | 200 | mW |
| Thermal resistance junction to ambient | $R_{\theta JA}$ | 500 | °C/W |
| Junction temperature | T_J | 125 | °C |
| Storage temperature range | T_{STG} | -55~+150 | °C |

Electrical Specification ($T_A=25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Max | Unit |
|---------------------------------|------------|---|-----|-------------|------|
| Reverse breakdown voltage | $V_{(BR)}$ | $I_R=10\mu\text{A}$ | 40 | | V |
| Reverse voltage leakage current | I_R | $V_R=30\text{V}$ | | 200 | nA |
| Forward voltage | V_F | $I_F=1\text{mA}$ $I_F=40\text{mA}$ | | 380 1000 | mV |
| Diode capacitance | C_D | $V_R=0, f=1\text{MHz}$ | | 5 | pF |
| Reverse recovery time | t_{rr} | $I_{rr}=1\text{mA}, I_R=I_F=10\text{mA}$ $R_L=100\Omega$ | | 5 | ns |

MARKING:

| BAS40 | BAS40-06 | BAS40-05 | BAS40-04 |
|-------|----------|----------|----------|
| 43 | 46 | 45 | 44 |



RATINGS AND CHARACTERISTIC CURVES

