



浩畅半导体
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BAS40/-04/-05/-06 SCHOTTKY BARRIER DIODE

SOT-23 Plastic-Encapsulate Diodes

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客户确认：

公司签章：

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|----|-----|-----|-----|
| 部门 | 工程部 | 品保部 | 采购部 |
| 签名 | | | |
| 日期 | | | |

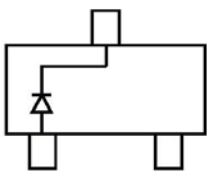
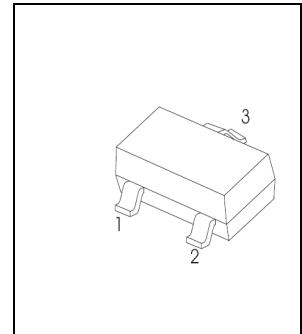


SOT-23 Plastic-Encapsulate Diodes

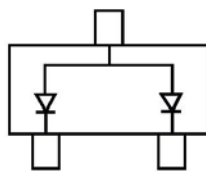
BAS40/-04/-05/-06 SCHOTTKY BARRIER DIODE

FEATURES

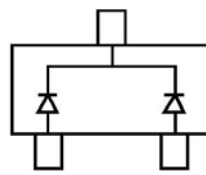
- Low Forward Voltage
- Fast Switching



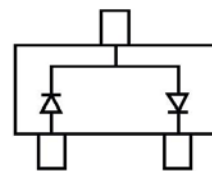
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BAS40-06



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BAS40-04

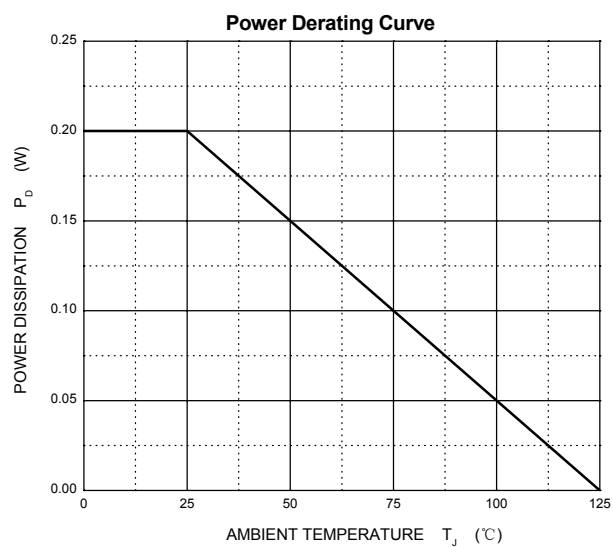
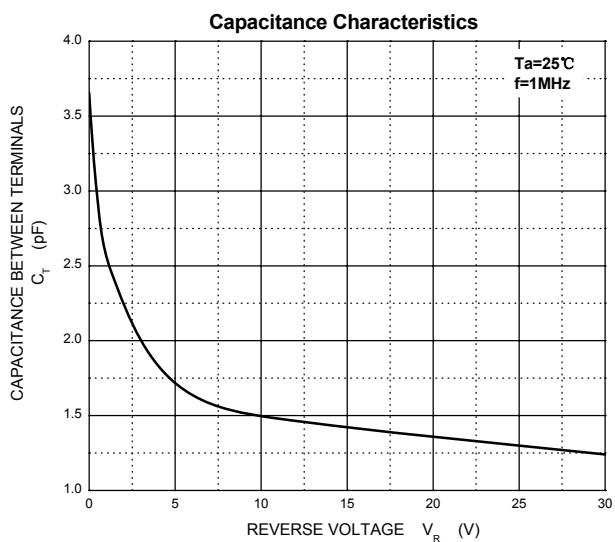
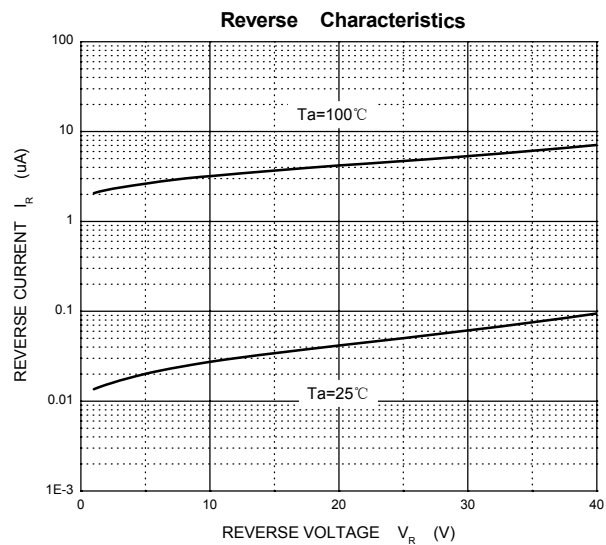
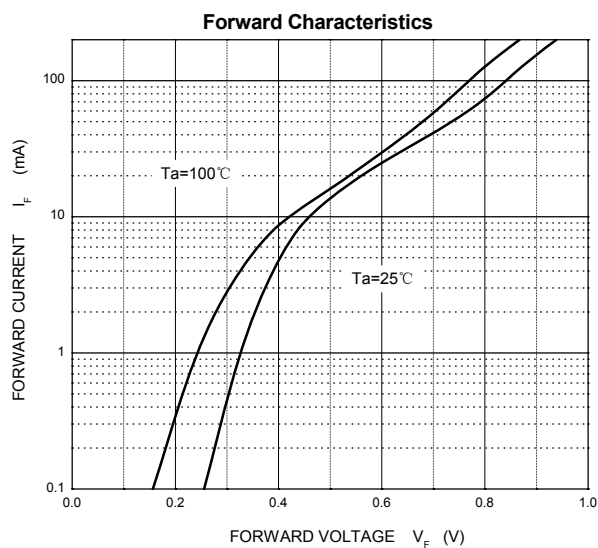
Maximum Ratings @Ta=25°C

| 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 |
| Average Rectified Output Current | I_O | 200 | mA |
| Non-Repetitive Peak Forward Surge Current @ t = 8.3ms | I_{FSM} | 0.6 | A |
| Power Dissipation | P_D | 200 | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 500 | °C/W |
| Operating Junction Temperature | T_J | 125 | °C |
| Storage Temperature | T_{STG} | -55~+150 | °C |

ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

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

Typical Characteristics



SOT-23 Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|----------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 0.900 | 1.150 | 0.035 | 0.045 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.900 | 1.050 | 0.035 | 0.041 |
| b | 0.300 | 0.500 | 0.012 | 0.020 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 2.800 | 3.000 | 0.110 | 0.118 |
| E | 1.200 | 1.400 | 0.047 | 0.055 |
| E1 | 2.250 | 2.550 | 0.089 | 0.100 |
| e | 0.950 TYP | | 0.037 TYP | |
| e1 | 1.800 | 2.000 | 0.071 | 0.079 |
| L | 0.550 REF | | 0.022 REF | |
| L1 | 0.300 | 0.500 | 0.012 | 0.020 |
| θ | 0° | 8° | 0° | 8° |

SOT-23 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.