

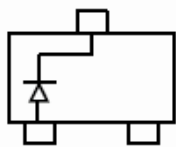
SWITCHING DIODE

BAS21/A/C/S

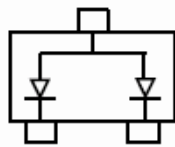
FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

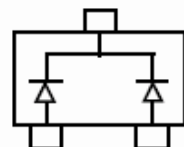
MARKING



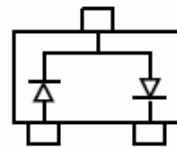
BAS21: JS



BAS21A: JS2



BAS21C: JS3



BAS21S: JS4



SOT-23

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

| Parameter | Symbol | Limit | Unit | |
|---|-----------------|-------------|------|---|
| Repetitive peak reverse voltage | V_{RRM} | 250 | V | |
| Working peak reverse voltage | V_{RWM} | | | |
| DC blocking voltage | V_R | | | |
| Forward continuous current | I_{FM} | 400 | mA | |
| Average rectified output current | I_O | 200 | mA | |
| Non-repetitive peak forward surge current | I_{FSM} | @ t = 1.0μs | 2.5 | A |
| | | @ t = 1.0s | 0.5 | |
| Repetitive peak forward surge current | I_{FRM} | 625 | mA | |
| Power dissipation | P_D | 225 | mW | |
| Thermal resistance junction to ambient | $R_{\theta JA}$ | 55 | °C/W | |
| Junction temperature | T_J | 150 | °C | |
| Storage temperature range | T_{STG} | -55~+150 | °C | |

Electrical Ratings @TA=25°C

| Parameter | Symbol | Test conditions | Min | Max | Unit |
|---------------------------------|------------|--|-----|------|------|
| Reverse breakdown voltage | $V_{(BR)}$ | $I_R=100\mu A$ | 250 | | V |
| Reverse voltage leakage current | I_R | $V_R=200V$ | | 0.1 | μA |
| Forward voltage | V_F | $I_F=100mA$ | | 1000 | mV |
| | | $I_F=200mA$ | | 1250 | |
| Diode capacitance | C_D | $V_R=0V, f=1MHz$ | | 5 | pF |
| Reveres recovery time | t_{rr} | $I_F=I_R=30mA, I_{tr}=0.1 \times I_R, R_L=100\Omega$ | | 50 | ns |

BAS21/A/C/S Typical Characteristics

