

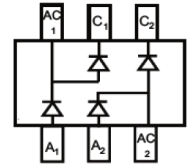
Surface Mount Schottky Barrier Diode

multicomp PRO



Features:

- Low Forward Voltage Drop
- Fast Switching
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring For Transient and ESD Protection
- Available in Lead Free Version



SOT-363

Applications:

High speed switching application

Max. Rating @ TA = 25°C unless otherwise specified

| Parameter | Symbol | Value | Unit |
|---|--|-------------|------|
| Repetitive peak reverse voltage Working peak reverse voltage DC reverse voltage | V _{RRM} V _{RMS} V _R | 30 | V |
| Forward continuous current | I _F | 200 | mA |
| Repetitive peak forward current | I _{FRM} | 300 | mA |
| Forward surge current @t<1.0s | I _{FSM} | 0.6 | A |
| Power dissipation | P _D | 200 | mW |
| Thermal resistance, junction to ambient | R _{θJA} | 625 | °C/W |
| Junction and storage temperature | T _j , T _{stg} | -65 to +150 | °C |

Electrical Characteristics @ TA = 25°C unless otherwise specified

| Parameter | Symbol | Conditions | Min. | Max. | Unit |
|---------------------------|--------------------|--|------|-----------------------------------|------|
| Reverse breakdown voltage | V _{(BR)R} | I _R = 100μA | 30 | - | V |
| Average reverse current | I _R | V _R = 25V | - | 2 | μA |
| Forward voltage | V _F | I _F = 0.1mA I _F = 1mA I _F = 10mA I _F = 30mA I _F = 100mA | - | 240 320 400 500 1,000 | mV |
| Total capacitance | C _T | V _R = 1V, f=1MHz | - | 10 | pF |
| Reverse recovery time | t _{rr} | I _F = I _R = 10mA, R _L = 100Ω | - | 5 | ns |

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Typical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

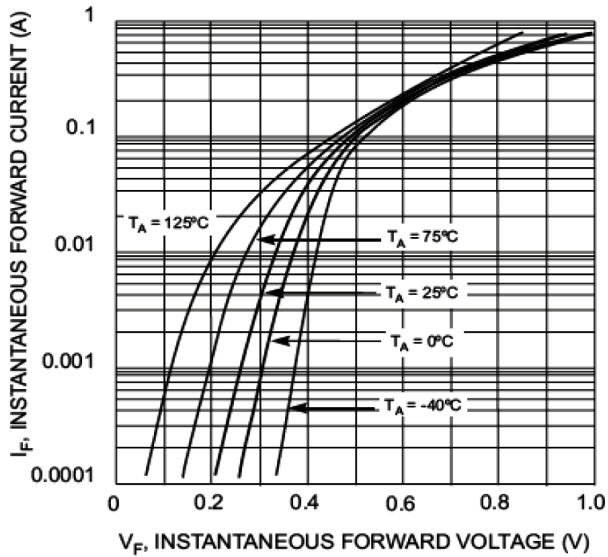


Fig. 1 Forward Characteristics

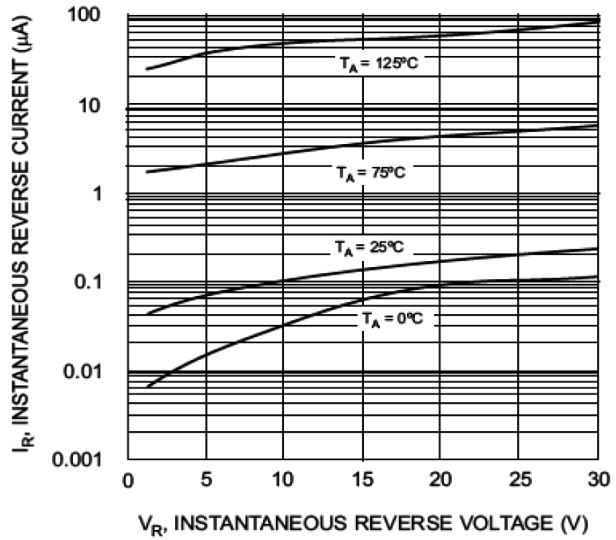
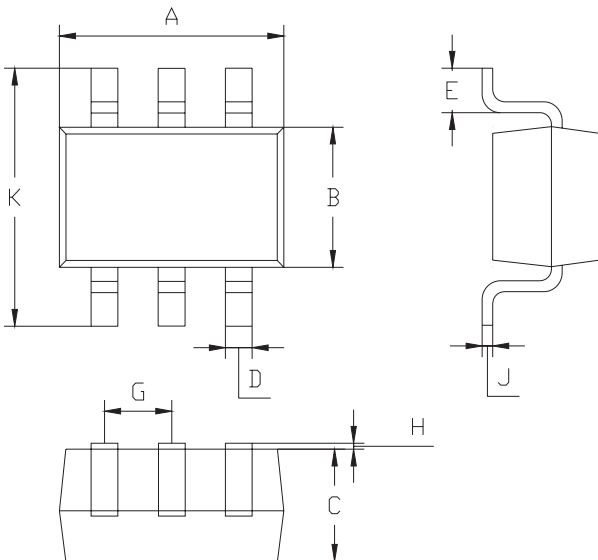


Fig. 2 Typical Reverse Characteristics

Plastic surface mounted package

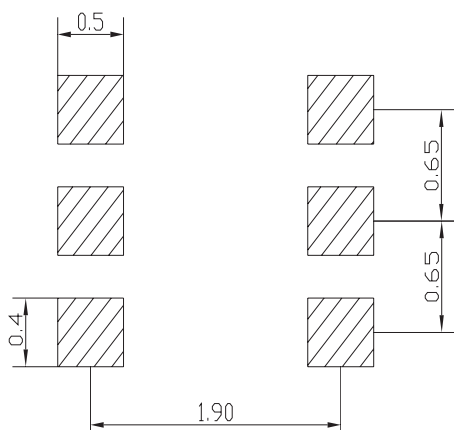


| SOT-363 | | |
|----------------------|--------------|------|
| Dim | Min | Max |
| A | 1.8 | 2.2 |
| B | 1.15 | 1.35 |
| C | 1.0 Typical | |
| D | 0.1 | 0.3 |
| E | 0.25 | 0.4 |
| G | 0.65 Typical | |
| H | 0.02 | 0.1 |
| J | 0.1 Typical | |
| K | 2.1 | 2.3 |
| All Dimensions in mm | | |

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Soldering Footprint



Unit : mm

Package Information

| Device | Package | Shipping |
|--------------|---------|---------------------|
| BAT54BRW-7-F | SOD-363 | 3,000 / Tape & Reel |

Part Number Table

| Description | Part Number |
|--------------------------------------|--------------|
| Surface Mount Schottky Barrier Diode | BAT54BRW-7-F |

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