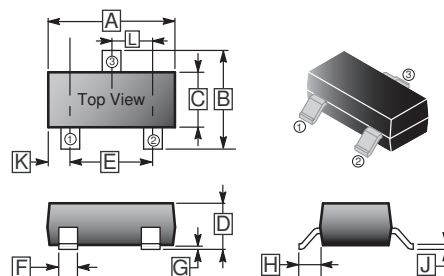


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

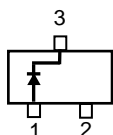
SOT-323

DESCRIPTION

- Fast switching speed
- For general purpose switching applications
- High conductance



MARKING: A2



| REF. | Millimeter | | REF. | Millimeter | |
|------|------------|------|------|------------|-------|
| | Min. | Max. | | Min. | Max. |
| A | 1.05 REF. | | E | 0.080 | 0.180 |
| B | 0.20 REF. | | F | 1.15 | 1.45 |
| C | 0.80 | 1.00 | G | 1.60 | 1.80 |
| D | 0.25 | 0.40 | H | 2.30 | 2.70 |

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise specified)

| PARAMETER | SYMBOL | VALUE | UNIT |
|--|-----------------------------------|--------------|-------|
| Non-Repetitive Peak Reverse Voltage | V _{RM} | 100 | V |
| Peak Repetitive Reverse Voltage | V _{RRM} | 75 | V |
| Working Peak Reverse Voltage | V _{RWM} | 75 | V |
| DC Blocking Voltage | V _R | 75 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 53 | V |
| Forward Continuous Current | I _{FM} | 300 | mA |
| Average Rectified Output Current | I _O | 150 | mA |
| Peak Forward Surge Current | I _{FSM} | @ t = 1.0µs | 2.0 |
| | | @ t = 1.0s | 1.0 |
| Power Dissipation | P _D | 200 | mW |
| Thermal Resistance Junction to Ambient | R _{θJA} | 625 | K / W |
| Junction & Storage Temperature | T _J , T _{STG} | 150, -65-150 | °C |

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

| PARAMETER | SYMBOL | MIN. | MAX. | UNIT | TEST CONDITION |
|---------------------------------|--------------------|------|-------|------|---|
| Reverse Breakdown Voltage | V _{(BR)R} | 75 | - | V | I _F = 10µA |
| Reverse Voltage Leakage Current | I _R | - | 1 | µA | V _R = 75V |
| | | - | 25 | nA | V _R = 20V |
| Forward Voltage | V _F | - | 0.715 | V | I _F = 1mA |
| | | - | 0.855 | V | I _F = 10mA |
| | | - | 1.00 | V | I _F = 50mA |
| | | - | 1.25 | V | I _F = 150mA |
| Diode Capacitance | C _D | - | 2 | pF | V _R = 0V, f = 1MHz |
| Reverse Recovery Time | t _{RR} | - | 4 | nS | I _F = I _R = 10mA, I _{rr} = 0.1 x I _R R _L = 100Ω |

RATINGS AND CHARACTERISTIC CURVES

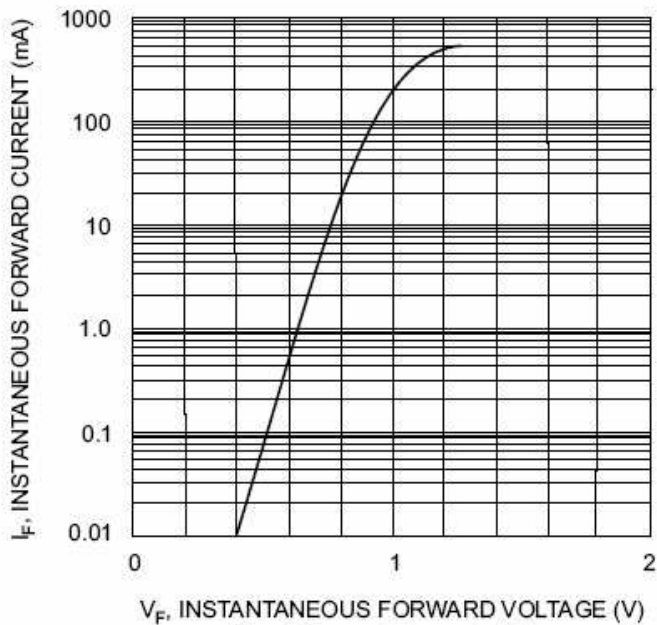


Fig. 1 Forward Characteristics

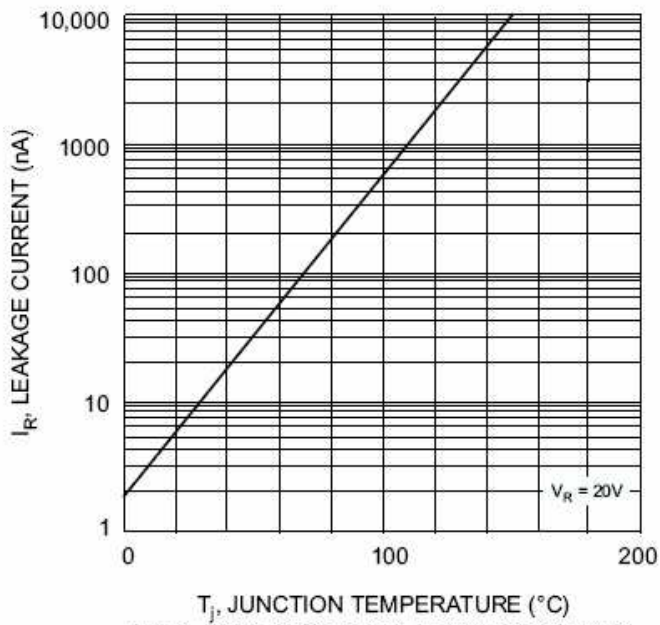


Fig. 2 Leakage Current vs Junction Temperature