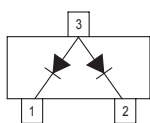


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

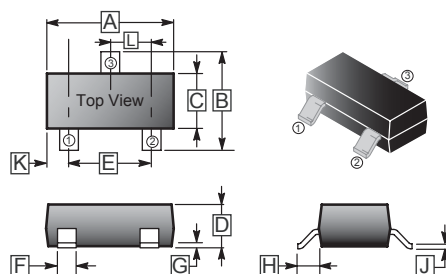
FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

MARKING: KJC



SOT-323



| REF. | Millimeter | | REF. | Millimeter | |
|------|------------|------|------|------------|------|
| | Min. | Max. | | Min. | Max. |
| A | 2.00 | 2.20 | F | 0.20 | 0.40 |
| B | 2.15 | 2.45 | G | - | - |
| C | 1.15 | 1.35 | H | 0.525 | REF. |
| D | 0.90 | 1.10 | J | 0.08 | 0.15 |
| E | 1.20 | 1.40 | | | |

ABSOLUTE MAXIMUM RATINGS (Single diode @ T_A = 25°C)

| Parameter | Symbol | Ratings | Unit |
|--|-----------------------------------|-----------------|------|
| Non-Repetitive Peak Reverse Voltage | V _{RM} | 100 | V |
| Peak Repetitive Peak Reverse Voltage | V _{RRM} | 75 | V |
| Working Peak Reverse Voltage | V _{RWM} | | |
| DC Blocking Voltage | V _R | | |
| 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} | @=1.0μs | 2.0 |
| | | @=1.0s | 1.0 |
| Power Dissipation | P _D | 200 | mW |
| Thermal Resistance Junction to Ambient | R _{θJA} | 625 | °C/W |
| Junction, Storage Temperature | T _J , T _{STG} | 150, -65 ~ +150 | °C |

ELECTRICAL CHARACTERISTICS (at T_a = 25°C unless otherwise specified)

| Parameters | Symbol | Min. | Max. | Unit | Test Conditions |
|---------------------------------------|--------------------|------|------|------|--|
| Reverse Breakdown Voltage | V _{(BR)R} | 75 | - | V | I _R = 2.5 μA |
| Reverse Voltage Leakage Current | I _R | - | 2.5 | μA | V _R = 75 V |
| | | | 25 | | nA |
| Forward Voltage | V _{F1} | - | 715 | mV | I _F = 1 mA |
| | V _{F2} | - | 855 | | I _F = 10 mA |
| | V _{F3} | - | 1000 | | I _F = 50 mA |
| | V _{F4} | - | 1250 | | I _F = 150 mA |
| Diode Capacitance (between Terminals) | C _T | - | 2 | pF | V _R = 0, f = 1MHz |
| Reverse Recovery Time | t _{RR} | - | 4 | nS | I _F = I _R = 10 mA, I _{RR} = 0.1xI _R , R _L =100Ω |

RATINGS AND CHARACTERISTIC CURVES

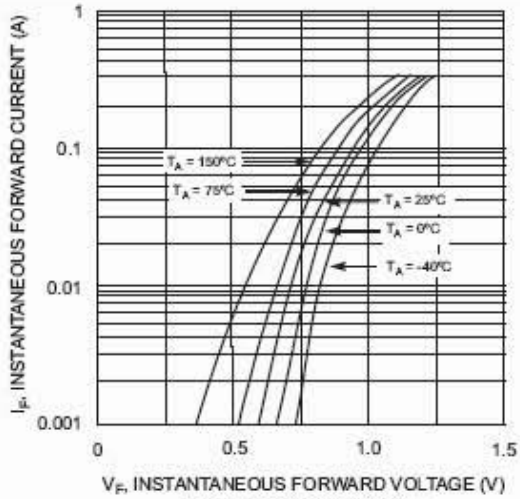


Fig. 1 Forward Characteristics

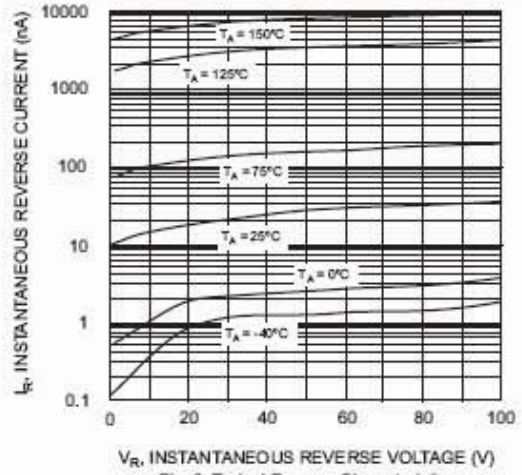


Fig. 2 Typical Reverse Characteristics

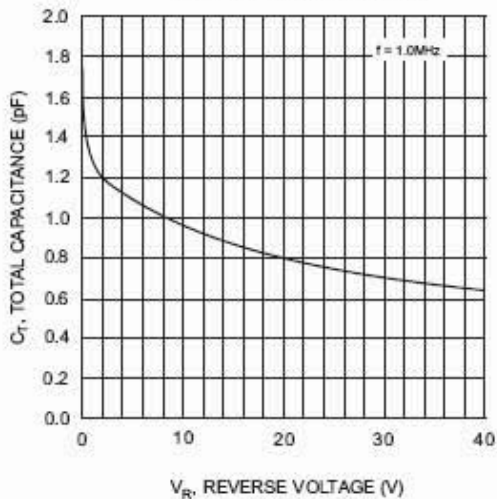


Fig. 3 Typical Capacitance vs. Reverse Voltage

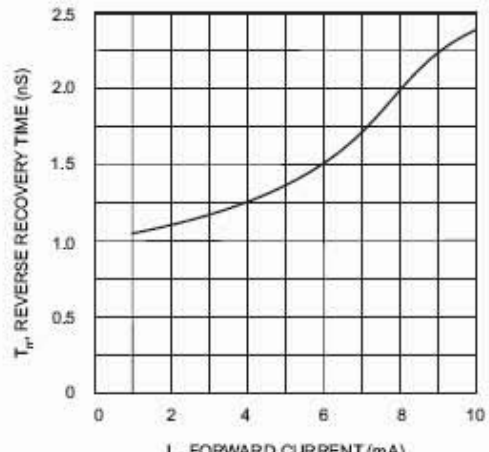


Fig. 4 Reverse Recovery Time vs. Forward Current

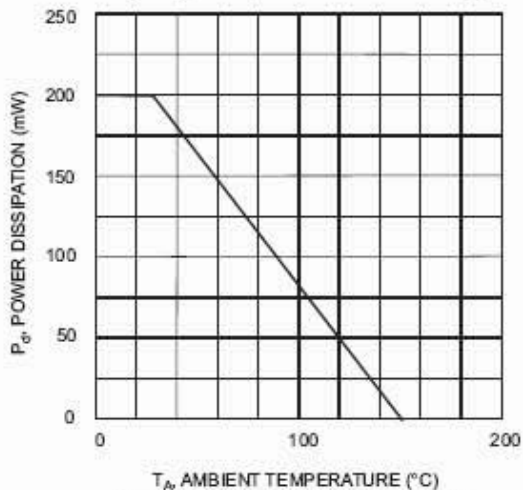


Fig. 5 Power Derating Curve, Total Package