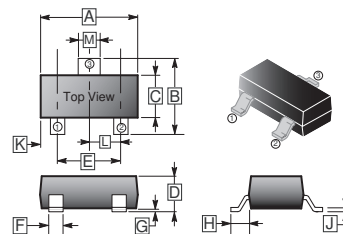


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

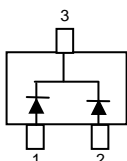
SOT-523

FEATURE

- ◆ Extra Small Power Mold Type.
- ◆ Low V_F
- ◆ High Reliability



MARKING: 3D



| REF. | Millimeter | | REF. | Millimeter | |
|------|------------|------|------|------------|-------|
| | Min. | Max. | | Min. | Max. |
| A | 1.5 | 1.7 | G | - | 0.1 |
| B | 1.45 | 1.75 | H | 0.55 REF. | |
| C | 0.75 | 0.85 | J | 0.1 | 0.2 |
| D | 0.7 | 0.9 | K | - | |
| E | 0.9 | 1.1 | L | 0.5 TYP. | |
| F | 0.15 | 0.25 | M | 0.25 | 0.325 |

ABSOLUTE MAXIMUM RATINGS at $T_A = 25^\circ\text{C}$

| PARAMETER | SYMBOL | RATINGS | UNIT |
|-------------------------------|----------------|--------------|------------------|
| Peak Reverse Voltage | V_{RM} | 40 | V |
| DC Reverse Voltage | V_R | 40 | V |
| Peak Forward Surge Current | I_{FM} | 200 | mA |
| Average Forward Current | I_O | 30 | mA |
| Power Dissipation | P_D | 150 | mW |
| Junction, Storage Temperature | T_J, T_{STG} | 125, -50~125 | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS (at $T_A = 25^\circ\text{C}$ unless otherwise specified)

| PARAMETERS | SYMBOL | TYP | MAX. | UNIT | TEST CONDITIONS |
|---------------------------------|--------|-----|------|---------------|----------------------------------|
| Reverse Voltage Leakage Current | I_R | - | 1 | μA | $V_R = 10\text{V}$ |
| Forward Voltage | V_F | - | 0.37 | V | $I_F = 1\text{mA}$ |
| Capacitance between Terminals | C_T | 2.0 | - | pF | $V_R = 1\text{V}, f=1\text{MHz}$ |

RATINGS AND CHARACTERISTIC CURVES

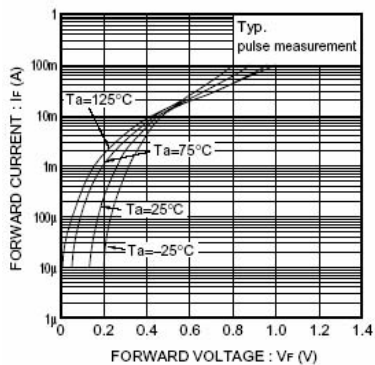


Fig. 1 Forward characteristics

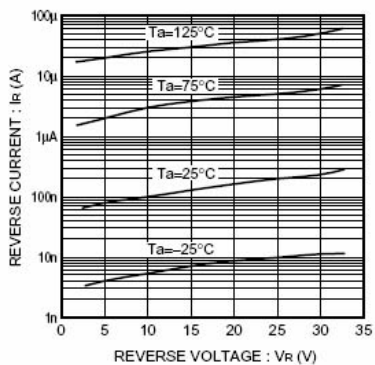


Fig. 2 Reverse characteristics

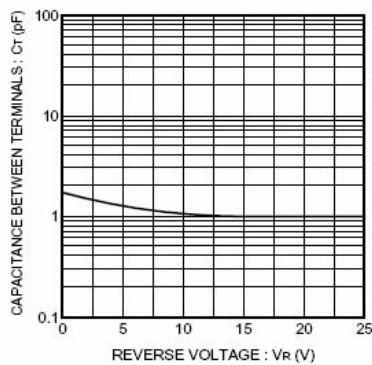


Fig. 3 Capacitance between terminals characteristics

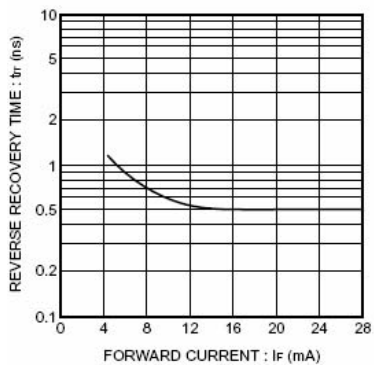


Fig. 4 Reverse recovery time characteristics