

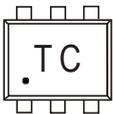
Plastic-Encapsulate Diodes

SWITCHING DIODE

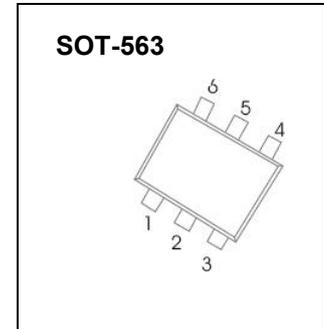
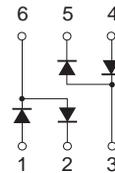
FEATURES

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance

Marking: TC



Solid point=Pin1 positioning point



Maximum Ratings @Ta=25°C

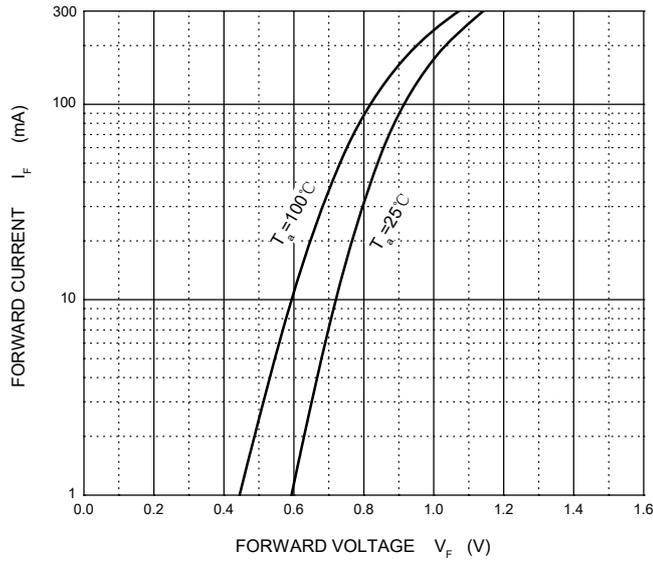
| Parameter | Symbol | Limit | Unit |
|---|-----------------|------------------|------|
| Peak Repetitive Peak Reverse Voltage | V_{RRM} | 75 | V |
| Working Peak Reverse Voltage | V_{RWM} | | |
| DC Blocking Voltage | V_R | | |
| Forward Continuous Current | I_{FM} | 300 | mA |
| Average Rectified Output Current | I_O | 150 | mA |
| Non-Repetitive Peak Forward Surge Current | I_{FSM} | @ t = 1.0μs 2 | A |
| | | @ t = 1.0s 1 | |
| Power Dissipation | P_D | 200 | mW |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 625 | °C/W |
| Operating Junction Temperature | T_J | 150 | °C |
| Storage Temperature | T_{STG} | -55~+150 | °C |

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

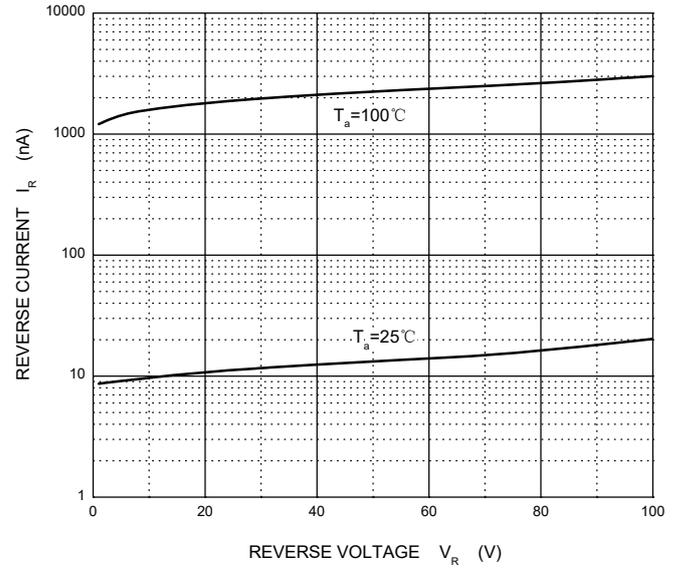
| Parameter | Symbol | Test conditions | Min | Max | Unit |
|---------------------------------|------------|---|-----|----------------------------|------|
| Reverse breakdown voltage | $V_{(BR)}$ | $I_R=100\mu A$ | 75 | | V |
| Reverse voltage leakage current | I_R | $V_R=75V$ $V_R=20V$ | | 2.5 0.030 | μA |
| Forward voltage | V_F | $I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$ | | 715 855 1000 1250 | mV |
| Junction capacitance | C_T | $V_R=0, f=1MHz$ | | 2 | pF |
| Revers recovery time | t_{rr} | $I_F=I_R=10mA, I_{rr}=0.1 \times I_R,$ $R_L=100\Omega$ | | 4 | ns |

Typical Characteristics

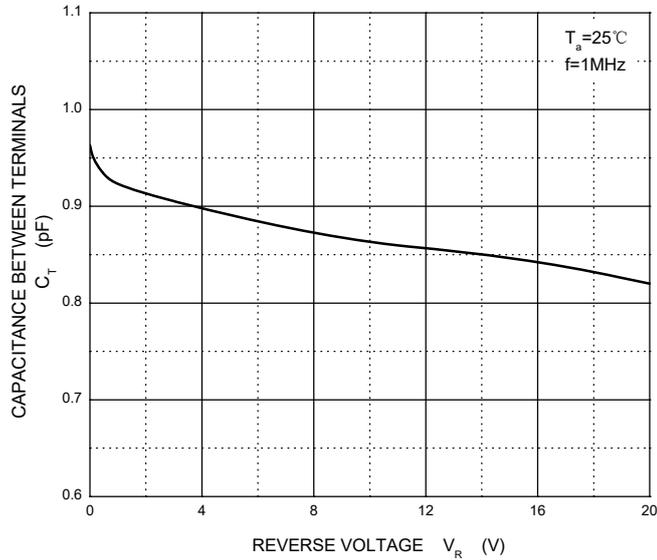
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

