

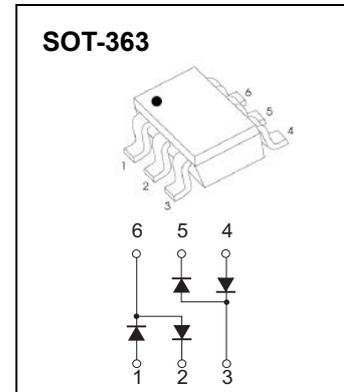
Plastic-Encapsulate Diodes

Multi-Chip Diode

FEATURES

- Surface Mount Package Ideally Suited for Automatic Insertion
- Very Low Leakage Current

MARKING:K52



Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25 °C

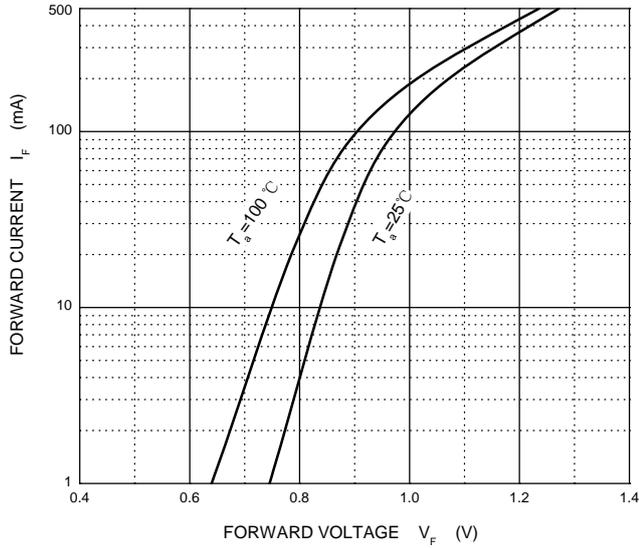
| Symbol | Parameter | Value | Unit |
|-----------------|--|----------|------|
| V_{RRM} | Peak Repetitive Reverse Voltage | 85 | V |
| V_{RWM} | Working Peak Reverse Voltage | | |
| V_R | DC Reverse Voltage | 85 | V |
| I_O | Average Rectified Output Current | 160 | mA |
| I_{FSM} | Non-Repetitive Peak Forward Surge Current @t=8.3ms | 1 | A |
| P_D | Power Dissipation | 200 | mW |
| $R_{\theta JA}$ | Thermal Resistance from Junction to Ambient | 625 | °C/W |
| T_j | Junction Temperature | 150 | °C |
| T_{stg} | Storage Temperature | -55~+150 | °C |

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

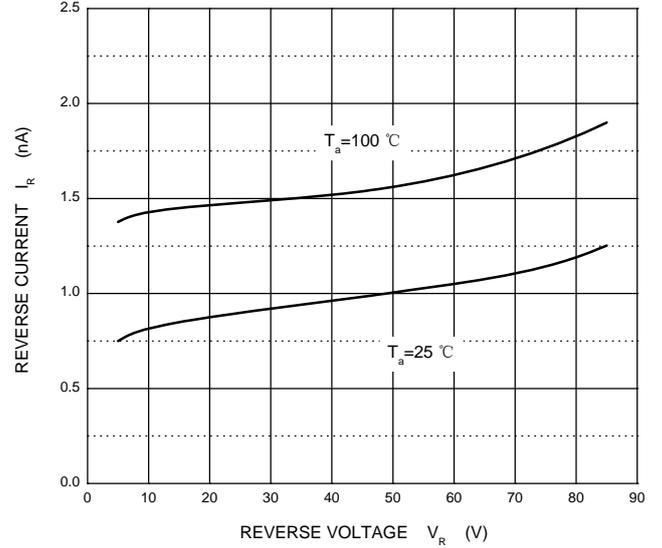
| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|---------------------------------|------------|--|-----|-----|---------------------------|---------|
| Reverse breakdown voltage | $V_{(BR)}$ | $I_R=100\mu A$ | 85 | | | V |
| Reverse voltage leakage current | I_R | $V_R=75V$ | | | 5 | nA |
| Forward voltage | V_F | $I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$ | | | 0.9 1.0 1.1 1.25 | V |
| Total capacitance | C_{tot} | $V_R=0V, f=1MHz$ | | 2 | | pF |
| Reveres recovery time | t_{rr} | $I_F=I_R=10mA$ $I_{rr}=0.1I_R, R_L=100\Omega$ | | | 3 | μs |

Typical Characteristics

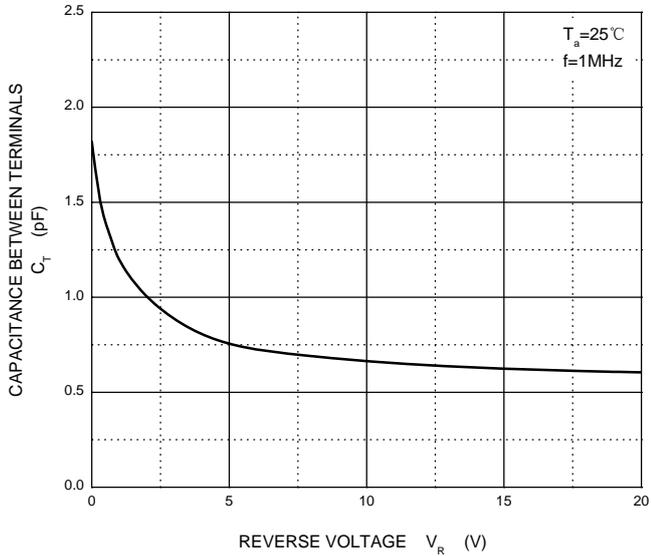
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

