

SURFACE MOUNT SCHOTTKY BARRIER DIODE

SOT-23

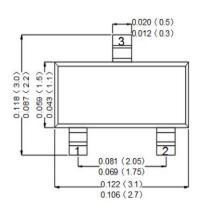
Features

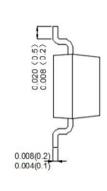
- Small Surface Mounting Type
- High Conductance

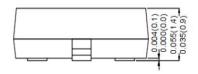
Mechanical Data

- Case:Molded Plastic,SOT-23
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable perMIL-STD-750,Method-2026.
- · Marking: 4T
- Mounting Position : Any.
- Equivalent Circuit:









Dimensions in inches and (millimeters)

Maximum Ratings Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified.)

| Symbol | Parameter | Value | Unit | |
|------------------|---|----------|------------|--|
| V_{RRM} | Maximum Repetitive Reverse Voltage | 30 | V | |
| Io | Forward Current | 50 | mA | |
| P _D | Power Dissipation | 200 | mW | |
| R _{eJA} | Thermal Resistance from Junction to Ambient | 500 | °C/W | |
| T _j | Junction Temperature | 125 | $^{\circ}$ | |
| T _{stg} | Storage Temperature | -55~+150 | °C | |

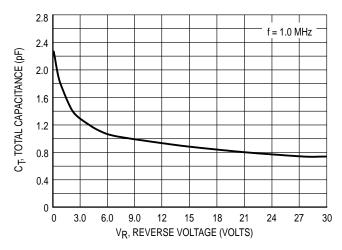
Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified.)

| Parameter | Symbol | Test conditions | Min | Тур | Max | Unit |
|-------------------|------------------|-----------------------------|-----|-----|------|------|
| Reverse voltage | $V_{(BR)}$ | I _R =10μA | 30 | | | V |
| Reverse current | I _R | V _R =25V | | | 200 | nA |
| Forward voltage | V _F | I _F =1mA | | | 0.45 | V |
| | | I _F =10mA | | | 0.6 | |
| Total capacitance | C _{tot} | V _R =15V, f=1MHz | | | 1.5 | pF |

version:00 1 of 3



Rating And Characteristic Curves



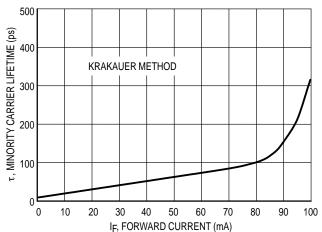
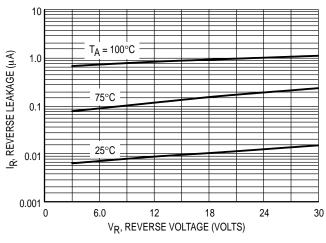


Figure 1. Total Capacitance

Figure 2. Minority Carrier Lifetime



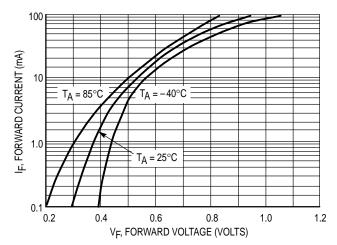


Figure 3. Reverse Leakage

Figure 4. Forward Voltage

A

version:00 2 of 3



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version:00 3 of 3