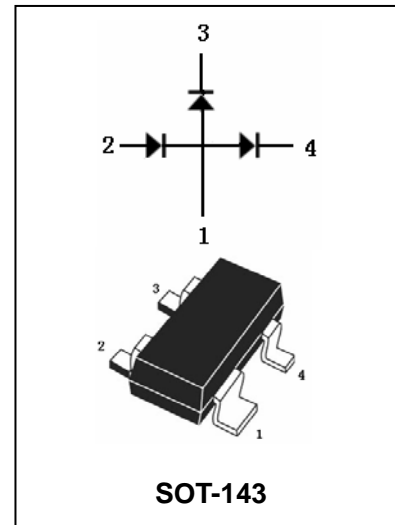


Surface mount switching diode

3DT21

FEATURES

- Fast switching speed.
- Surface mount package ideally suited for Automatic insertion.
- For general purpose switching applications.
- High conductance.



APPLICATIONS

- High speed switching application.

ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| 3DT21 | T21 | SOT-143 |

MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Characteristic | Symbol | Value | Unit |
|--------------------------------------------|-----------------|-------------|------|
| Peak Repetitive Reverse Voltage | V_R | 250 | V |
| Forward Continuous Current | I_F | 200 | mA |
| Power Dissipation | P_d | 250 | mW |
| Thermal Resistance Junction to Ambient Air | $R_{\theta JA}$ | 500 | °C/W |
| Operating Junction Temperature Range | T_j | 150 | °C |
| Storage Temperature Range | T_{STG} | -65 to +150 | °C |



Surface mount switching diode

3DT21

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Characteristic | Symbol | Min | MAX | UNIT | Test Condition |
|---------------------------|-------------|-----|--------------|---------|--------------------------------------|
| Reverse breakdown Voltage | $V_{(BR)R}$ | 250 | - | V | $I_R=100\mu A$ |
| Reverse Leakage Current | I_R | - | 1 | μA | $V_R=200V$ |
| Forward voltage | V_F | - | 1000 1250 | mV | $I_F=100mA$ $I_F=200mA$ |
| Diode Capacitance | C_D | - | 5.0 | pF | $V_R=0V, f=1.0MHz$ |
| Reverse Recovery Time | t_{rr} | - | 50 | ns | $I_F=I_R=10mA, t_{rr}=0.1 \cdot I_R$ |

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

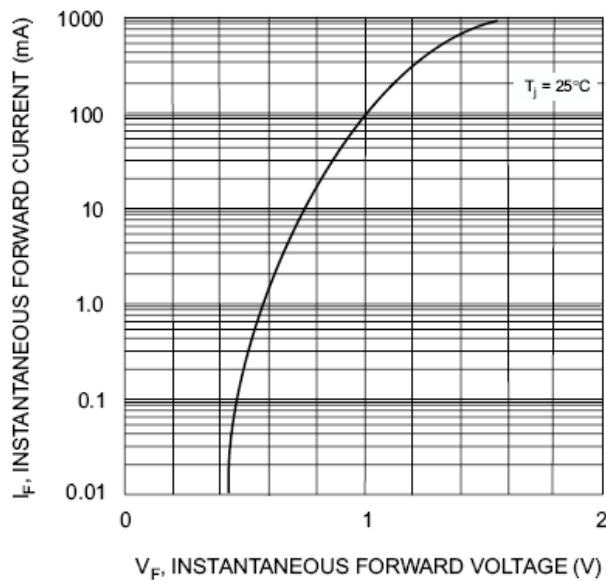


Fig. 1 Forward Characteristics

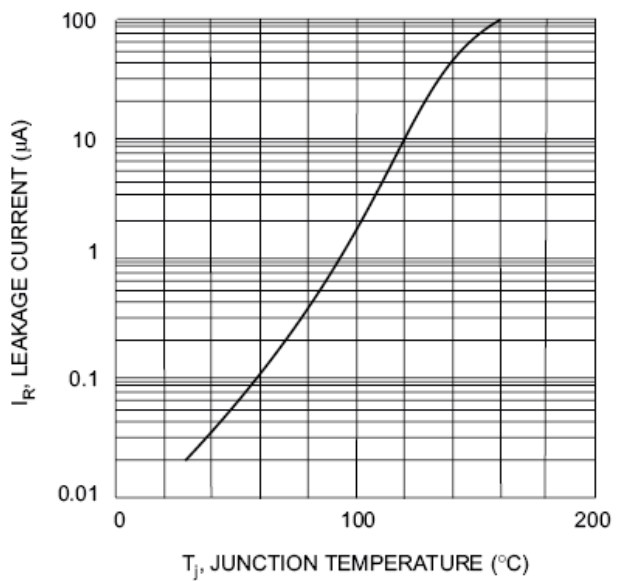


Fig. 2 Leakage Current vs Junction Temperature

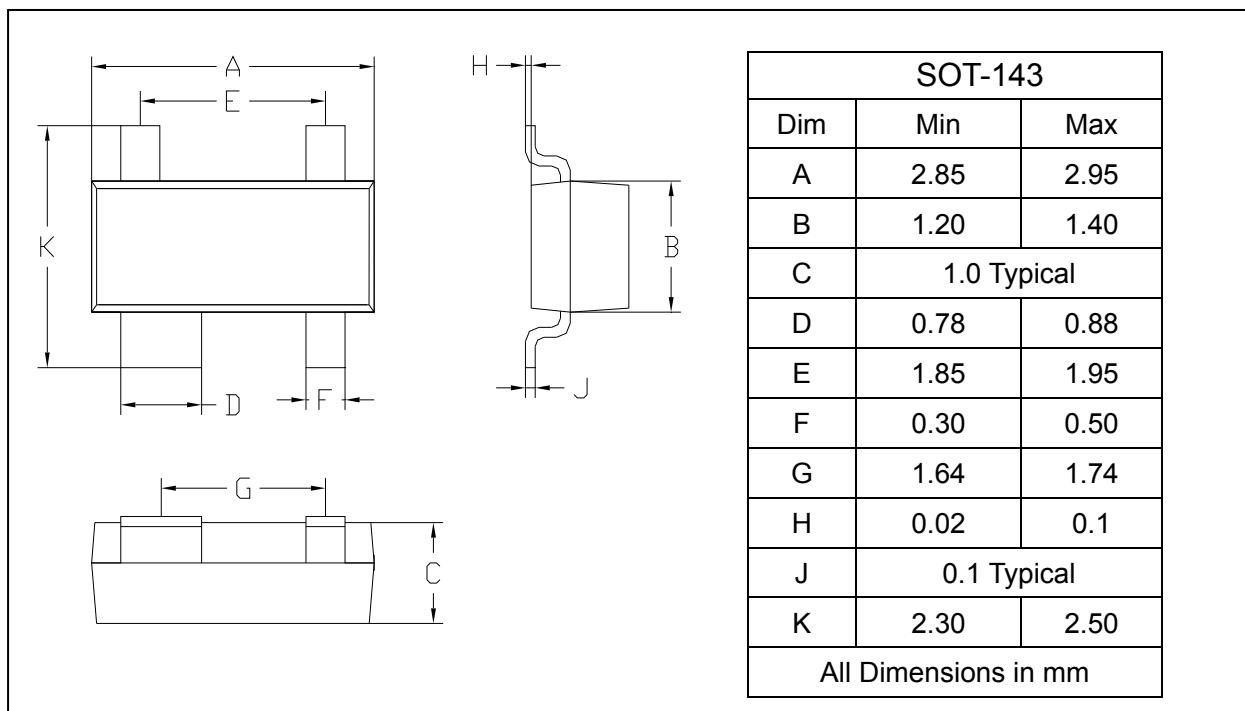
Surface mount switching diode

3DT21

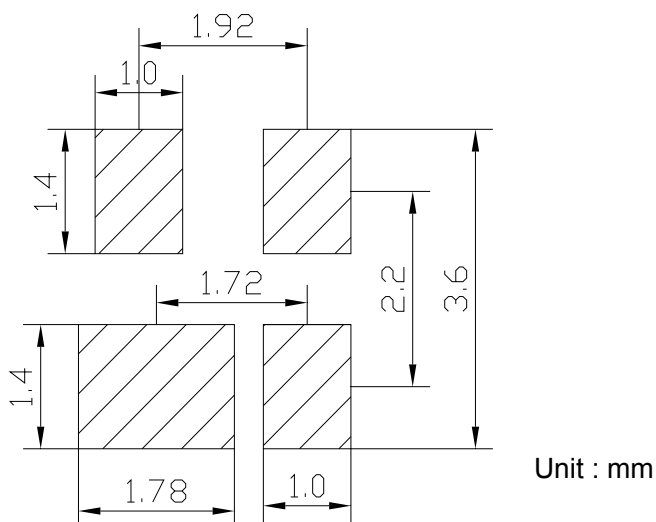
PACKAGE OUTLINE

Plastic surface mounted package

SOT-143



SOLDERING FOOTPRINT



PACKAGE INFORMATION

| Device | Package | Shipping |
|--------|---------|-----------------|
| 3DT21 | SOT-143 | 3000/ Tape&Reel |