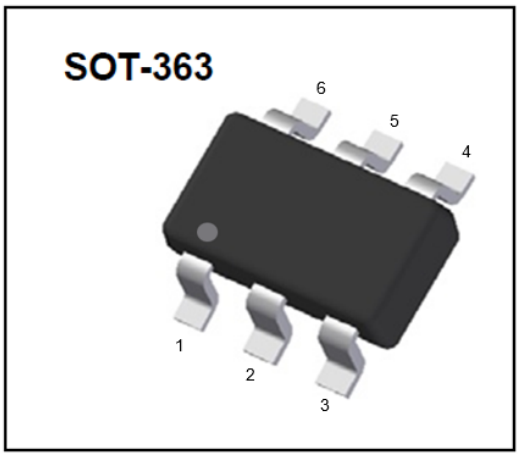
# Switching Diodes




## Features

- We declare that the material of product compliance with RoHS requirements and Halogen Free
- Surface mount package ideally suited for automatic Insertion
- Moisture Sensitivity Level 1
- Reverse voltage：250 V
- Average forward current ：200mA

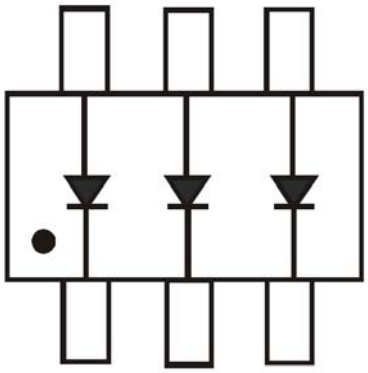
## Application

- Fast switching
- Low leakage current
- Low junction capacitance

## Mechanical Data

- Package: SOT-363
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Marking: XJK

## ■Equivalent circuit



## ■ Maximum Ratings (Ta=25℃ Unless otherwise specified）

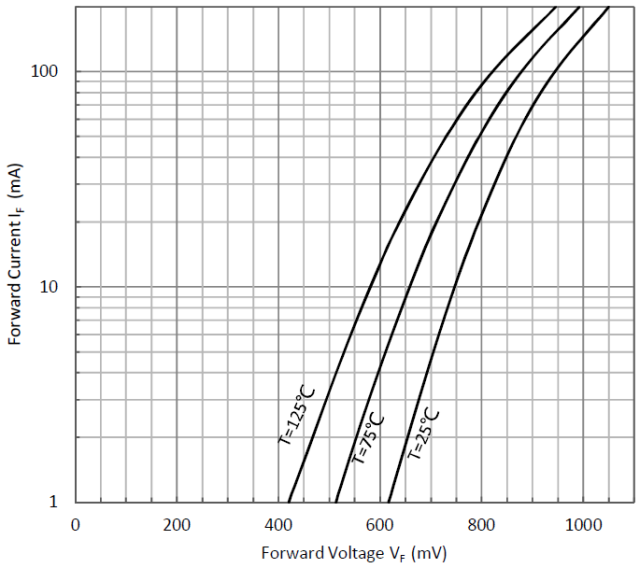
| PARAMETER | SYMBOL | UNIT | Conditions | VALUE |
|---|---|---|---|---|
| Repetitive peak reverse voltage | $V_{RRM}$ | V | | 250 |
| Reverse voltage | $V_R$ | V | | 250 |
| Average forward current | $I_{FAV}$ | mA | | 200 |
| Non-repetetive peak forward surge current | $I_{FSM}$ | A | 8.3ms half-sine wave | 1.7 |
| Power dissipation | $P_D$ | mW | | 200 |
| Thermal Resistance Junction to Ambient Air | RθJA | ℃/W | | 625 |
| Maximum junction temperature | $T_j$ | ℃ | | -55 ~+150 |
| Storage temperature range | $T_{stg}$ | ℃ | | -55 ~+150 |

## ■ Electrical Characteristics (Ta=25℃ unless otherwise specified)

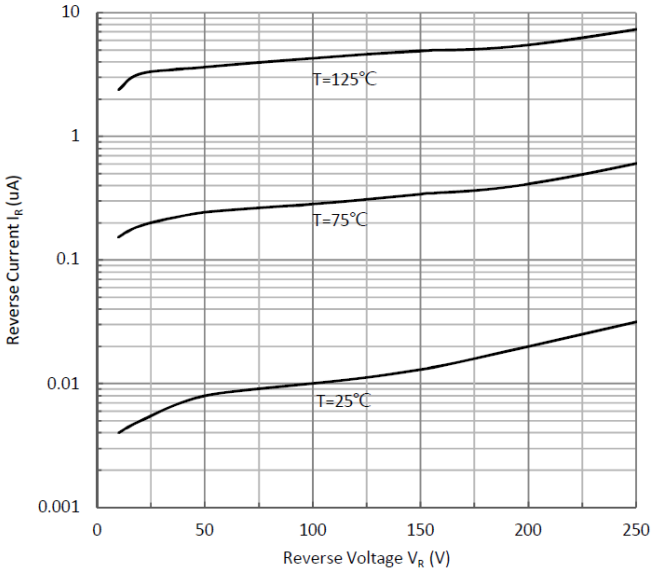
| PARAMETER | Symbol | UNIT | Conditions | Min | Max |
|---|---|---|---|---|---|
| Breakdown Voltage | $V_R$ | V | $I_R$=100uA | 250 | |
| Forward Voltage | $V_F$ | V | $I_F$=100mA | | 1.05 |
| | | | $I_F$=200mA | | 1.25 |
| Reverse Leakage Current | $I_R$ | nA | $V_R$=200V | | 100 |
| Capacitance | Cj | pF | $V_R$=0V,f=1MHz | | 5 |
| Reverse Recovery Time | $T_{RR}$ | ns | $I_F$=$I_R$=30mA，Irr=1mA | | 50 |

## ■ **Electrical Characteristics** (Typical)

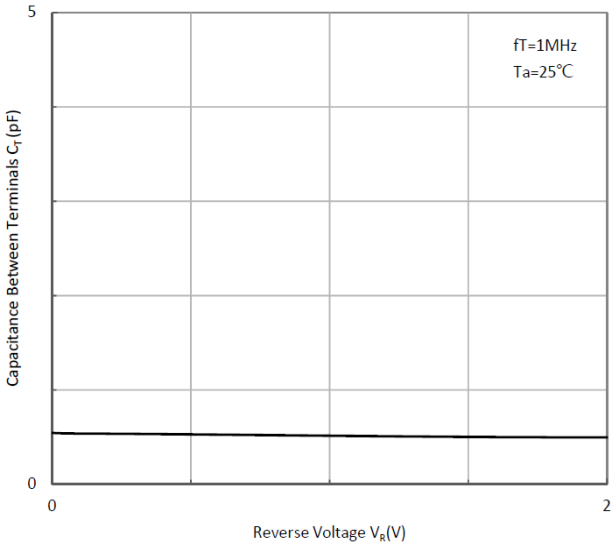
Forward Characteristics



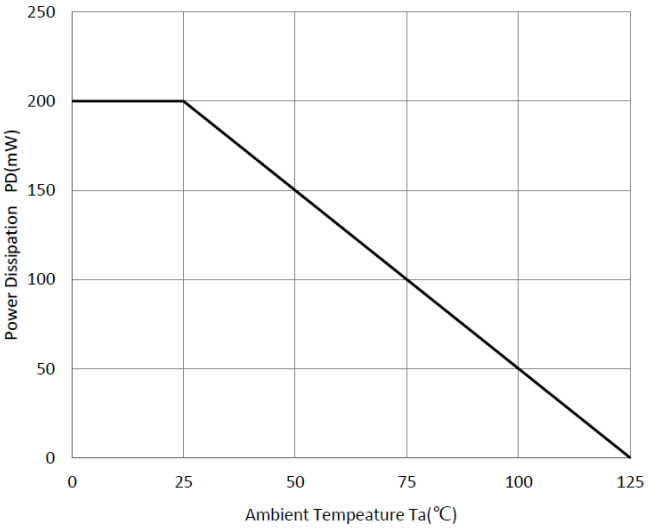

Reverse Characteristics




Capacitance Characteristics



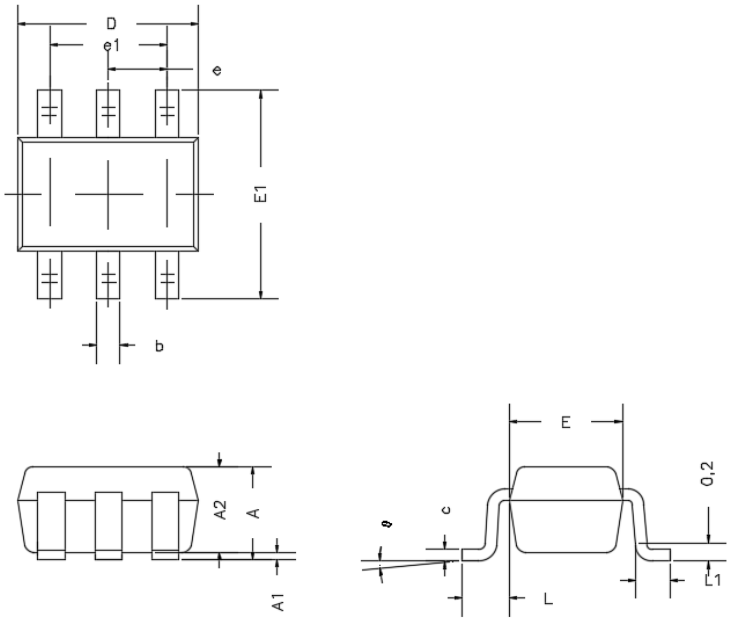

Power Derating Curve



## ■ Ordering Information (Example)

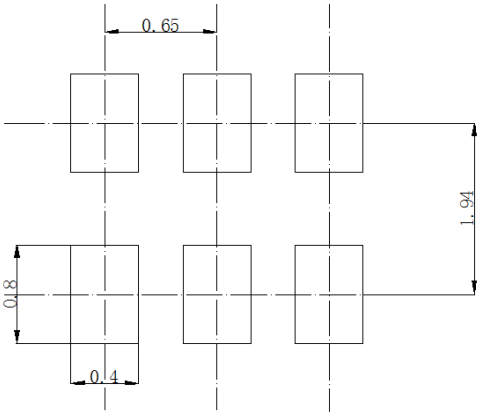
| PREFERED P/N | PACKING CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---|---|---|---|---|---|---|
| BAS21TW | F2 | Approximate 0.009g | 3000 | 30000 | 120000 | 7” reel |

## ■SOT-363 Package Outline Dimensions




| DIMENSIONS | | | | |
|---|---|---|---|---|
| DIM | INCHES | | MM | |
| | MIN | MAX | MN | MAX |
| A | 0.035 | 0.043 | 0.900 | 1.100 |
| A1 | 0.000 | 0.004 | 0.000 | 0.100 |
| A2 | 0.035 | 0.039 | 0.900 | 1.000 |
| b | 0.006 | 0.014 | 0.150 | 0.350 |
| c | 0.002 | 0.010 | 0.050 | 0.250 |
| D | 0.071 | 0.087 | 1.800 | 2.200 |
| E | 0.045 | 0.053 | 1.150 | 1.350 |
| E1 | 0.085 | 0.096 | 2.150 | 2.450 |
| e | 0.026TYP | | 0.65TYP | |
| e1 | 0.047 | 0.055 | 1.200 | 1.400 |
| L | 0.021TYP | | 0.525TYP | |
| L1 | 0.010 | 0.018 | 0.260 | 0.460 |
| θ | 0° | 8° | 0° | 8° |

## ■SOT-363 Soldering Footprint




Unit：mm

## Notice

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