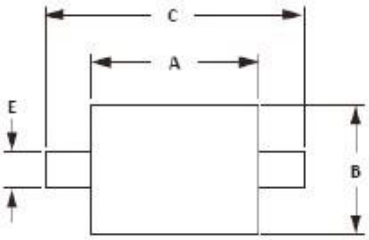
# BAS321

## General Purpose Diode

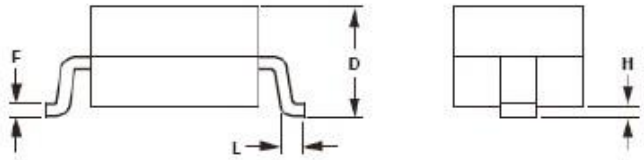
### Features

- Very small plastic SMD package.
- High switching speed:max. 50ns
- Continuous reverse voltage:max.200v
- Repetitive peak reverse voltage:max.250v
- Repetitive peak forward current:max.650mA
- RoHS compliant package




### Mechanical Data

- Case: SOD-323 Molded plastic
- Epoxy: UL94V-O rate flame retardant

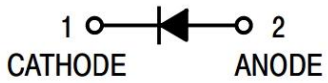



### Packing & Order Information

3,000/Reel

RoHS COMPLIANT

Graphic symbol




| OUTLINE DIMENSIONS | | | | |
|---|---|---|---|---|
| DIM | MILLIMETERS | | INCHES | |
| | MIN | MAX | MIN | MAX |
| A | 1.60 | 1.90 | 0.063 | 0.075 |
| B | 1.15 | 1.45 | 0.045 | 0.057 |
| C | 2.39 | 2.70 | 0.094 | 0.106 |
| D | 0.80 | 1.10 | 0.031 | 0.043 |
| E | 0.25 | 0.40 | 0.010 | 0.016 |
| F | 0.10 | 0.20 | 0.004 | 0.008 |
| H | - | 0.10 | - | 0.004 |
| L | 0.20 | - | 0.008 | - |

NOTES
1. Controlling dimension: millimeters.
2. Dimensioning and tolerances per ANSI Y14.5M, 1985.
3. Dimensions are exclusive of mold flash and metal burrs.

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings ($T_A$=25°C unless otherwise specified)

| Symbol | Parameter | MIN | MAX | Unit |
|---|---|---|---|---|
| PD(Ta=25°C) | Power dissipation | | 300 | mW |
| IF | Forward Current | | 250 | ma |
| VR | Reverse Voltage VR | | 200 | V |
| $T_J/T_{STG}$ | Junction and Storage Temperature | | -55 to +150 | °C |
| V(BR) | Reverse Breakdown Voltage(IR=100uA) | 250 | -- | V |
| IR | Reverse Leakage Current(VR=200V) | | 1 | uA |
| VF | Forward Voltage(Test Condition)<br>IF=100mA<br>IF=200mA | | <br>1.0<br>1.25 | V |
| CD | Diode Capacitance (VR=0V, f=1MHz) | | 2 | pF |
| Trr | Reverse Recovery Time | | 50 | nS |

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■Typical Device Characteristics

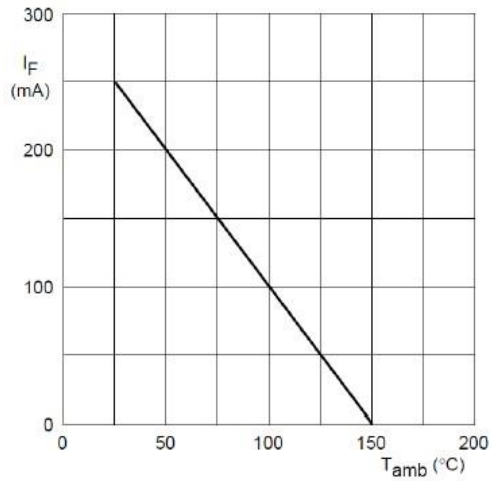


FIG.1- MAXIMUM PERMISSIBLE CONTINUOUS FORWARD CURRENT AS A FUNCTION OF AMBIENT TEMPERATURE

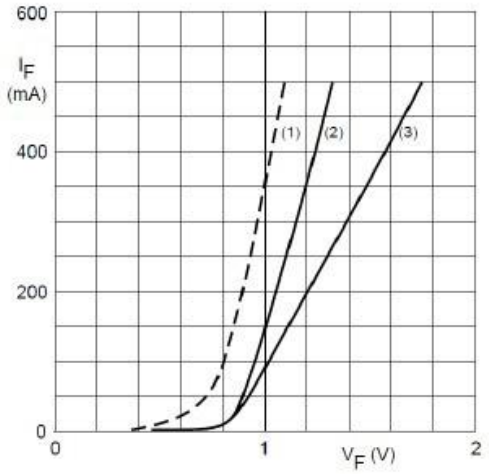


FIG.2- FORWARD CURRENT AS A FUNCTION OF FORWARD VOLTAGE

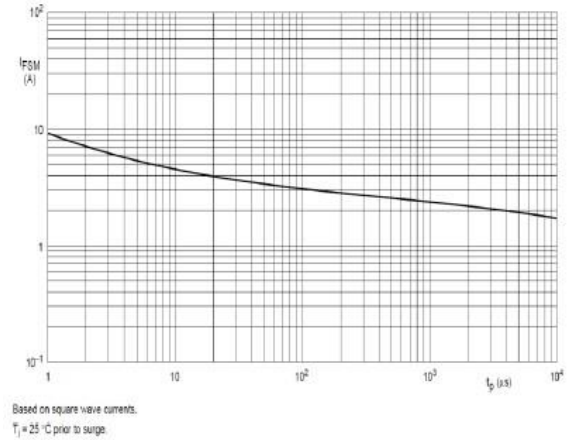


FIG.3- MAXIMUM PERMISSIBLE NON-REPETITIVE PEAK FORWARD CURRENT AS A FUNCTION OF AMBIENT TEMPERATURE

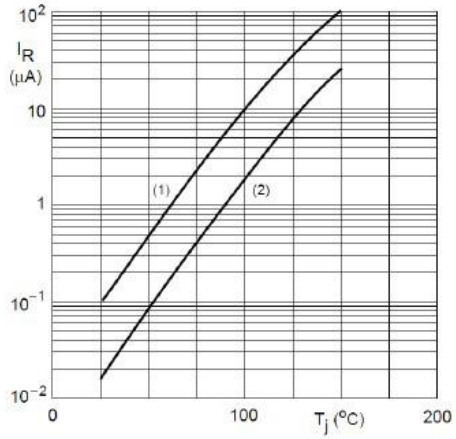


FIG.4- REVERSE CURRENT AS A FUNCTION OF JUNCTION TEMPERATURE

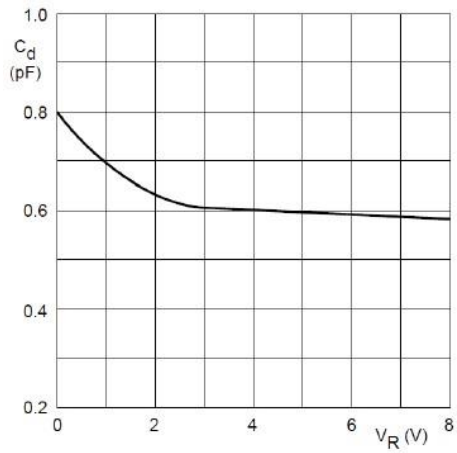


Fig 5- DIODE CAPACITANCE AS A FUNCTION OF REVERSE VOLTAGE, TYPICAL VALUES

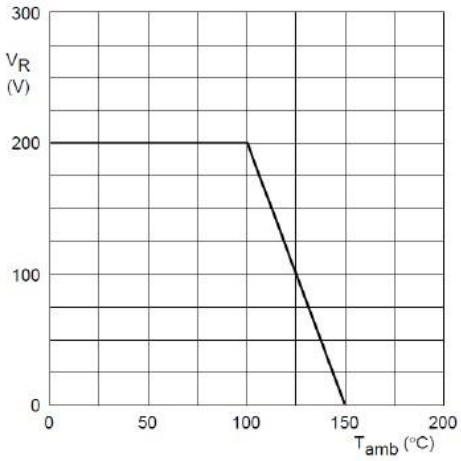


Fig 6- DIODE CAPACITANCE AS A FUNCTION OF REVERSE VOLTAGE, TYPICAL VALUES

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