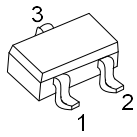
# BAP64-04

*DIODE*

## SILICON PIN DIODES




SOT-23
(JEDEC TO-236)

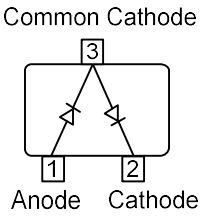
### ■ DESCRIPTION

The UTC **BAP64-04** is General-purpose PIN diode in an SOD-323 small plastic SMD package.

### ■ FEATURES

* High voltage, current controlled
* RF resistor for RF attenuators and switches
* Low diode capacitance
* Low diode forward resistance
* Low series inductance
* For applications up to 3 GHz
* Green & Pb Free

### ■ SYMBOL




### ■ ORDERING INFORMATION

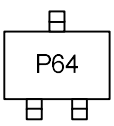
| Ordering Number | Package | Pin Assignment | | | Packing |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | |
| BAP64-04G-AE3-R | SOT-23 | A | K | K | Tape Reel |

Note: Pin Assignment: A: Anode K: Cathode K: Common Cathode

BAP64-04G-AE3-R

| | |
|---|---|
| (1)Packing Type | (1) R: Tape Reel |
| (2)Package Type | (2) AE3: SOT-23 |
| (3)Green Package | (3) G: Halogen Free and Lead Free |

### ■ MARKING





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## ■ ABSOLUATE MAXIMUM RATINGS ($T_A$=25°C, unless otherwise specified)

| PARAMETER | SYMBOL | RATINGS | UNITS |
|---|---|---|---|
| Reverse Voltage | $V_R$ | 175 | V |
| Forward Current | $I_F$ | 100 | mA |
| Power Dissipation ($T_J$=90°C) | $P_D$ | 250 | mW |
| Junction Temperature | $T_J$ | -65 ~ +150 | °C |
| Storage Temperature | $T_{STG}$ | -65 ~ +150 | °C |

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

## ■ THERMAL DATA

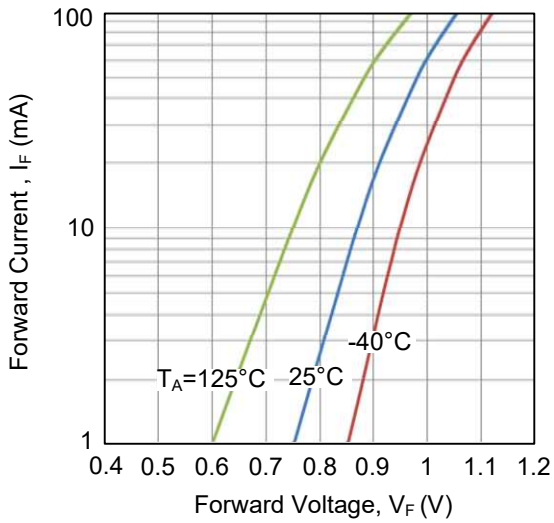
| PARAMETER | SYMBOL | RATINGS | UNIT |
|---|---|---|---|
| Junction to Case | $\theta_{JC}$ | 500 | °C/W |

## ■ ELECTRICAL CHARACTERISTICS ($T_J$=25°C, unless otherwise specified)

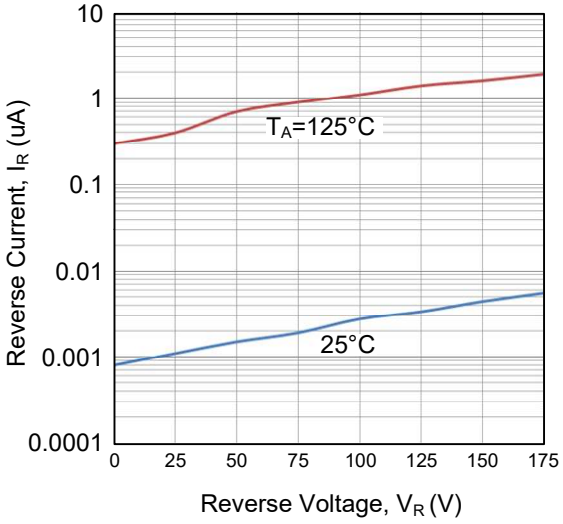
| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|---|
| Reverse Voltage | $V_R$ | $I_R$=10μA | 175 | | | V |
| Reverse Current | $I_R$ | $V_R$=175V | | | 10 | μA |
| | | $V_R$=20V | | | 1 | μA |
| Forward Voltage | $V_F$ | $I_F$=50mA | | 0.9 | 1.1 | V |
| Diode Capacitance | $C_d$ | $V_R$=0V, f=1MHz | | 0.36 | | pF |
| | | $V_R$=1V, f=1MHz | | 0.3 | | pF |
| | | $V_R$=5V, f=1MHz | | 0.26 | | pF |

## ■ TYPICAL CHARACTERISTICS

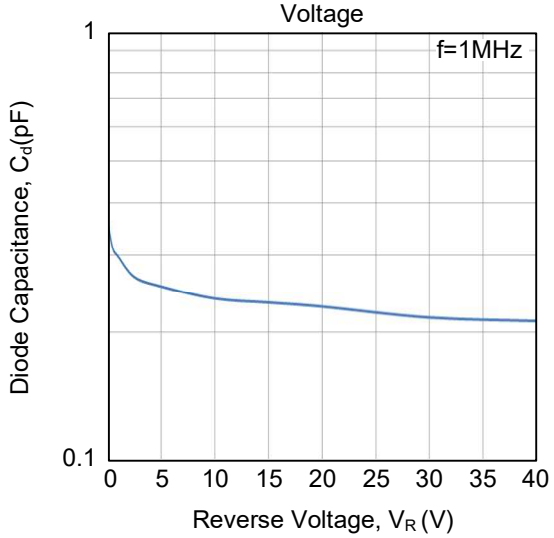
Forward Current vs. Forward Voltage



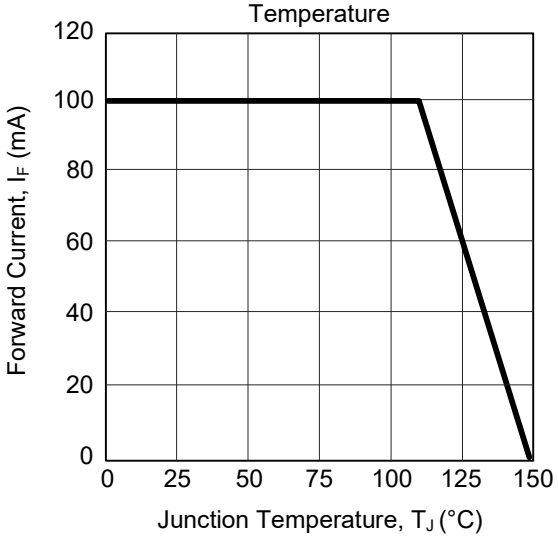

Reverse Current vs. Reverse Voltage




Diode Capacitance vs. Reverse Voltage




Forward Current vs. Junction Temperature




UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.