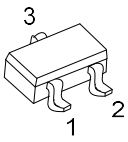
# BAP64-05W

*DIODE*

## SILICON PIN DIODES




SOT-323

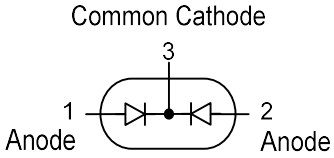
### ■ DESCRIPTION

The UTC **BAP64-05W** is two planar PIN diodes in common cathode configuration in a SOT-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



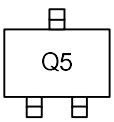

### ■ ORDERING INFORMATION

| Ordering Number | Package | Pin Assignment | | | Packing |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | |
| BAP64-05WG-AL3-R | SOT-323 | A | A | K | Tape Reel |

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

| | |
|---|---|
| BAP64-05WG-AL3-R<br>(1)Packing Type<br>(2)Package Type<br>(3)Green Package | (1) R: Tape Reel<br>(2) AL3: SOT-323<br>(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) | $P_D$ | 240 | 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

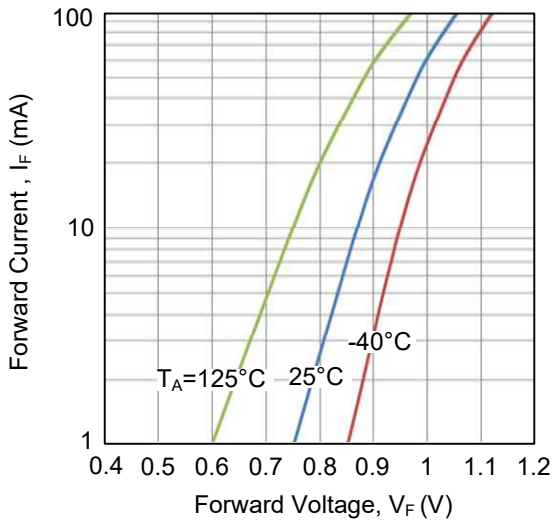
| PARAMETER | SYMBOL | RATINGS | UNIT |
|---|---|---|---|
| Junction to Case | $\theta_{JC}$ | 520 | °C/W |

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

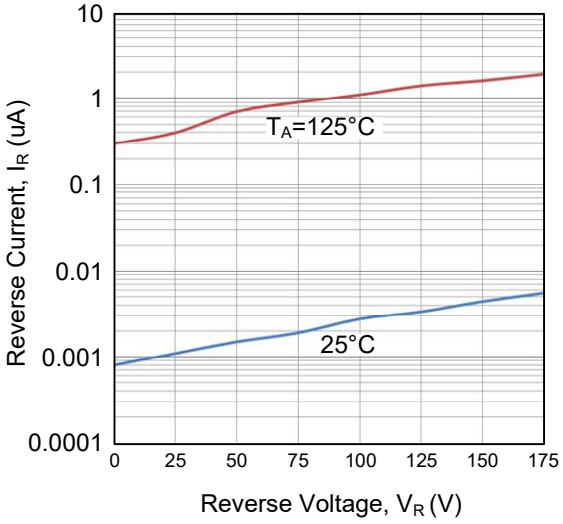
| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|---|
| Reverse Voltage | $V_R$ | $I_R$=10μA | 175 | | | V |
| Reverse Current | $I_R$ | $V_R$=175V | | | 10 | μA |
| | | $V_R$=20V | | | 1 | μA |
| Forward Voltage | $V_F$ | $I_F$=50mA | | 0.9 | 1.1 | V |
| Diode 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

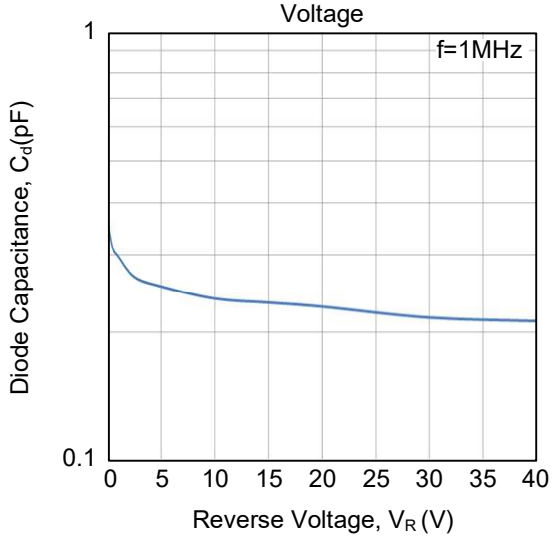
Forward Current vs. Forward Voltage



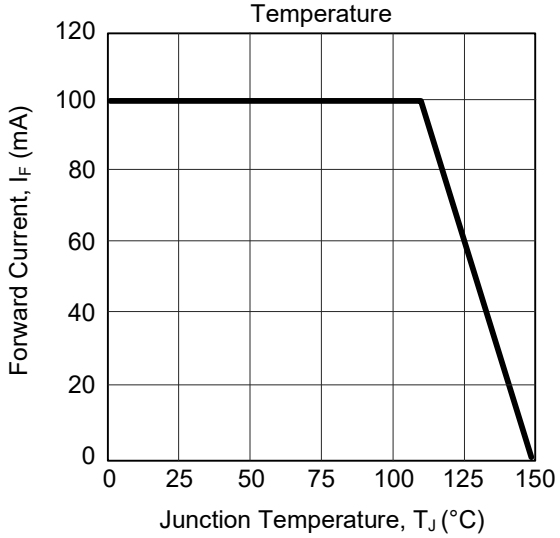

Reverse Current vs. Reverse Voltage




Diode Capacitance vs. Reverse Voltage




Forward Current vs. Junction Temperature




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