



BAP1321-03

Preliminary

DIODE

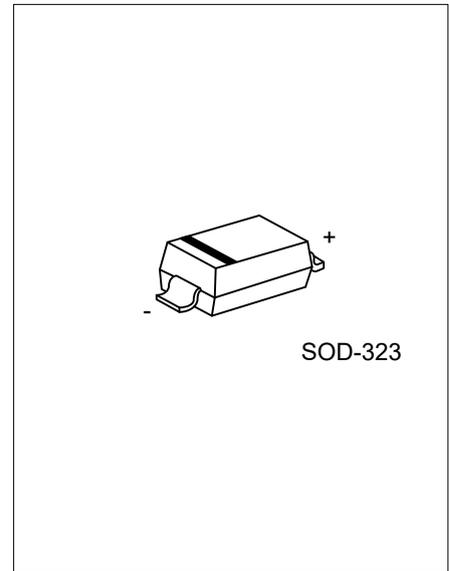
SILICON PIN DIODES

DESCRIPTION

The UTC BAP1321-03 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
- * Very low series inductance
- * For applications up to 3 GHz



SYMBOL



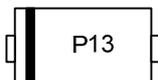
ORDERING INFORMATION

| Ordering Number | | Package | Pin Assignment | | Packing |
|-------------------|-------------------|---------|----------------|---|-----------|
| Lead Free | Halogen Free | | 1 | 2 | |
| BAP1321-03L-CB2-R | BAP1321-03G-CB2-R | SOD-323 | K | A | Tape Reel |

Note: Pin Assignment: K: Cathode A: Anode

| | |
|--------------------------|--|
| <p>BAP1321-03G-CB2-R</p> | <p>(1) R: Tape Reel (2) CB2: SOD-323 (3) G: Halogen Free and Lead Free, L: Lead Free</p> |
|--------------------------|--|

MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, unless otherwise specified)

| PARAMETER | SYMBOL | RATINGS | UNITS |
|--|-----------|------------|------------------|
| Reverse Voltage | V_R | 60 | V |
| Forward Current | I_F | 100 | mA |
| Power Dissipation ($T_J=90^\circ\text{C}$) | P_D | 500 | mW |
| Junction Temperature | T_J | -65 ~ +150 | $^\circ\text{C}$ |
| Storage Temperature | T_{STG} | -65 ~ +150 | $^\circ\text{C}$ |

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 | θ_{JC} | 250 | $^\circ\text{C/W}$ |

■ ELECTRICAL CHARACTERISTICS ($T_J=25^\circ\text{C}$, unless otherwise specified)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|-------------------|--------|-----------------------------------|-----|------|-----|------|
| Reverse Voltage | V_R | $I_R=10\mu\text{A}$ | 60 | | | V |
| Reverse Current | I_R | $V_R=60\text{V}$ | | | 100 | nA |
| Forward Voltage | V_F | $I_F=50\text{mA}$ | | 0.92 | 1.1 | V |
| Diode Capacitance | C_d | $V_R=0\text{V}$, $f=1\text{MHz}$ | | 0.53 | | pF |
| | | $V_R=1\text{V}$, $f=1\text{MHz}$ | | 0.46 | | pF |

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