



2SC2734

Preliminary

NPN EPITAXIAL SILICON TRANSISTOR

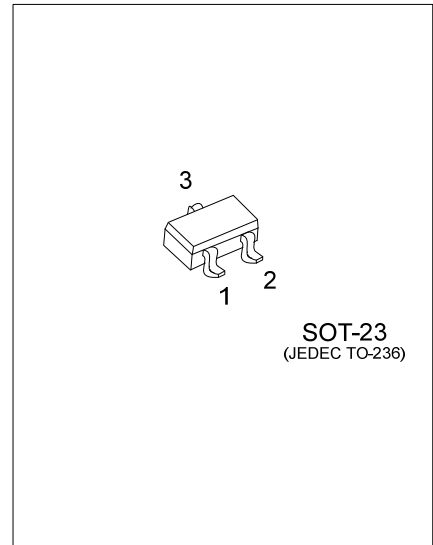
NPN EPITAXIAL TRANSISTOR

■ DESCRIPTION

The UTC **2SC2734** is an NPN epitaxial transistor; it uses UTC's advanced technology to provide the customers with high DC current gain, etc.

■ FEATURES

- * high DC current gain
- * UHF frequency converter



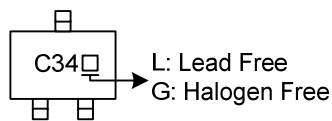
■ ORDERING INFORMATION

| Ordering Number | | Package | Pin Assignment | | | Packing |
|-----------------|----------------|---------|----------------|---|---|-----------|
| Lead Free | Halogen-Free | | 1 | 2 | 3 | |
| 2SC2734L-AE3-R | 2SC2734G-AE3-R | SOT-23 | B | E | C | Tape Reel |

Note: Pin Assignment: B: Base E: Emitter C: Collector

| | |
|--|---|
| <p>2SC2734G-AE3-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p> | <p>(1) R: Tape Reel (2) AE3: SOT-23 (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 | UNIT |
|--|-----------|------------|------------------|
| Collector-Base Voltage | V_{CBO} | 20 | V |
| Collector-Emitter Voltage | V_{CEO} | 11 | V |
| Emitter-Base Voltage | V_{EBO} | 3 | V |
| Collector Current | I_C | 50 | mA |
| Collector Power Dissipation ($T_C=25^\circ\text{C}$) | P_C | 150 | mW |
| Junction Temperature | T_J | +150 | $^\circ\text{C}$ |
| Storage Temperature | T_{STG} | -55 ~ +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.

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

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|---|-----|-----|-----|---------------|
| Collector-Base Breakdown Voltage | BV_{CBO} | $I_C=10\mu\text{A}$, $I_E=0$ | 20 | | | V |
| Collector-Emitter Breakdown Voltage | BV_{CEO} | $I_C=1\text{mA}$, $R_{BE}=\infty$ | 11 | | | V |
| Emitter-Base Breakdown Voltage | BV_{EBO} | $I_E=10\mu\text{A}$, $I_C=0$ | 3 | | | V |
| Collector Cut-Off Current | I_{CBO} | $V_{CB}=10\text{V}$, $I_C=0$ | | | 0.5 | μA |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=10\text{mA}$, $I_B=5\text{mA}$ | | | 0.7 | V |
| DC Current Gain | h_{FE} | $V_{CE}=10\text{V}$, $I_C=5\text{mA}$ | 20 | | 200 | |
| Feedback Capacitance | C_{re} | $V_{CB}=10\text{V}$, $f=1\text{MHz}$, $I_E=0$ | | 1 | | pF |
| Transition Frequency | f_T | $V_{CE}=10\text{V}$, $I_C=10\text{mA}$ | | 3.5 | | GHz |

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