



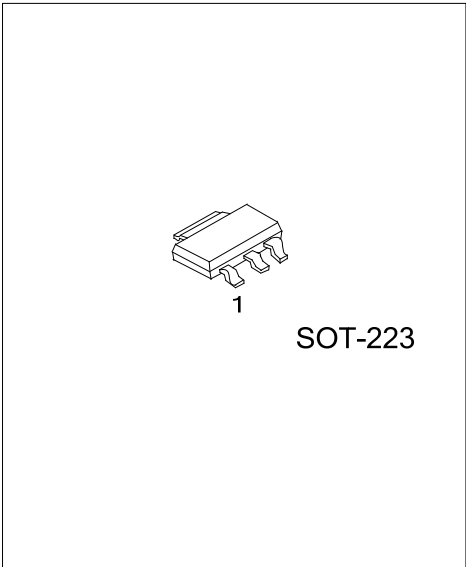
PZTA06

NPN SILICON TRANSISTOR

AMPLIFIER TRANSISTOR

■ FEATURES

- * Collector-Emitter Voltage: $V_{CE0}=80V$
- * Collector Dissipation: $P_D=350mW$



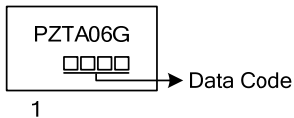
■ ORDERING INFORMATION

| Ordering Number | Package | Pin Assignment | | | Packing |
|-----------------|---------|----------------|---|---|-----------|
| | | 1 | 2 | 3 | |
| PZTA06G-AA3-R | SOT-223 | B | C | E | Tape Reel |

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

| | |
|--|---|
| <p>PZTA06G-AA3-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package | <ul style="list-style-type: none"> (1) R: Tape Reel (2) AA3: SOT-223 (3) G: Halogen Free and Lead Free |
|--|---|

■ MARKING



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

| PARAMETER | SYMBOL | RATINGS | UNIT |
|-----------------------------------|-----------|------------|------------------------------|
| Collector Base Voltage | V_{CBO} | 80 | V |
| Collector Emitter Voltage | V_{CEO} | 80 | V |
| Emitter Base Voltage | V_{EBO} | 4 | V |
| Collector Current - Continuous | I_C | 500 | mA |
| Total Device Dissipation (Note 2) | P_D | 1000 | mW |
| Derate Above 25°C | | 8 | $\text{mW}/^{\circ}\text{C}$ |
| Junction Temperature | T_J | +150 | $^{\circ}\text{C}$ |
| Storage Temperature | T_{STG} | -55 ~ +150 | $^{\circ}\text{C}$ |

Notes: 1. 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.

2. Device is mounted on FR-4 PCB $36 \times 18 \times 1.5$ mm, mounting pad for the collector lead minimum 6 cm^2 .

■ THERMAL DATA

| PARAMETER | SYMBOL | RATINGS | UNIT |
|---------------------|---------------|---------|-----------------------------|
| Junction to Ambient | θ_{JA} | 125 | $^{\circ}\text{C}/\text{W}$ |

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

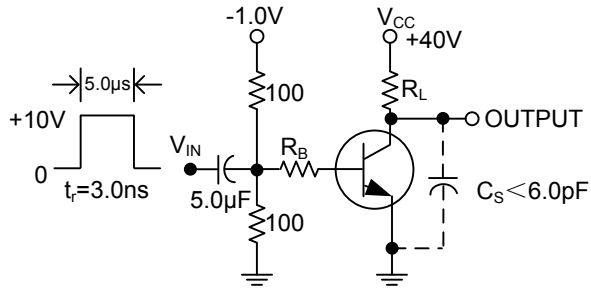
| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|--|---------------|--|-----|-----|------|---------------|
| OFF CHARACTERISTICS | | | | | | |
| Collector Emitter Breakdown Voltage (Note 1) | BV_{CEO} | $I_C=1.0\text{mA}, I_B=0$ | 80 | | | V |
| Emitter Base Breakdown Voltage | BV_{EBO} | $I_E=100\mu\text{A}, I_C=0$ | 4 | | | V |
| Collector Cutoff Current | I_{CES} | $V_{CE}=60\text{V}, I_B=0$ | | | 0.1 | μA |
| Collector Cutoff Current | I_{CBO} | $V_{CB}=80\text{V}, I_E=0$ | | | 0.1 | μA |
| ON CHARACTERISTICS | | | | | | |
| DC Current Gain | h_{FE} | $V_{CE}=1\text{V}, I_C=10\text{mA}$, | 100 | | | |
| | | $V_{CE}=1\text{V}, I_C=100\text{mA}$, | 100 | | | |
| Collector Emitter Saturation Voltage | $V_{CE(SAT)}$ | $I_C=100\text{mA}, I_B=10\text{mA}$ | | | 0.25 | V |
| Base Emitter on Voltage | $V_{BE(ON)}$ | $V_{CE}=1\text{V}, I_C=100\text{mA}$, | | | 1.2 | V |
| SMALL-SIGNAL CHARACTERISTICS | | | | | | |
| Current Gain Bandwidth Product (Note2) | f_T | $V_{CE}=2\text{V}, I_C=10\text{mA}, f=100\text{MHz}$ | 100 | | | MHz |

Notes: 1. Pulse test: $P_w \leq 300\mu\text{s}$, Duty Cycle $\leq 2\%$

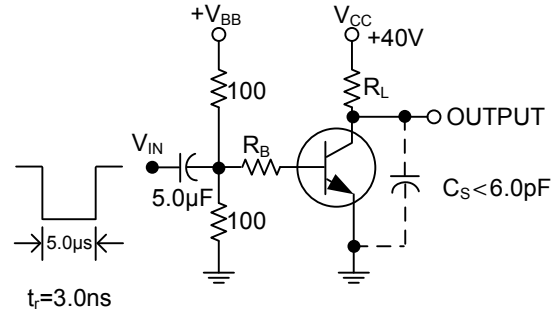
2. f_T is defined as the frequency at which I_{hfe} extrapolates to unity.

■ SWITCHING TIME TEST CIRCUITS

TURN-ON TIME



TURN-OFF TIME



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. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.