



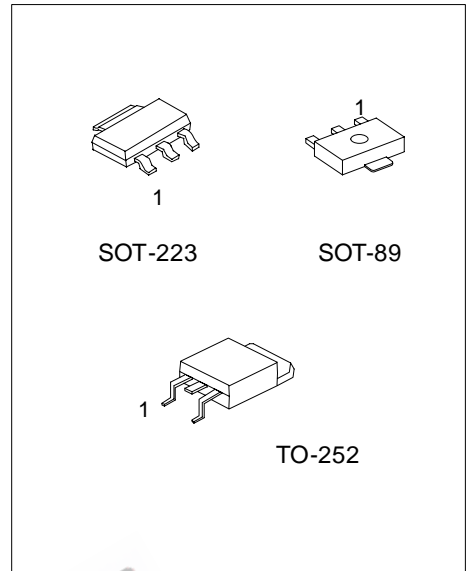
2SA1797

PNP SILICON TRANSISTOR

POWER TRANSISTOR

FEATURES

- * Low saturation voltage.
 $V_{CE(SAT)} = -0.35V(\text{Max})$ at $I_C / I_B = -1A / -50mA$
- * Excellent DC current gain characteristics



*Pb-free plating product number:2SA1797L

ORDERING INFORMATION

| Order Number | | Package | Pin Assignment | | | Packing |
|-----------------|-------------------|---------|----------------|---|---|-----------|
| Normal | Lead Free Plating | | 1 | 2 | 3 | |
| 2SA1797-x-AA3-R | 2SA1797L-x-AA3-R | SOT-223 | B | C | E | Tape Reel |
| 2SA1797-x-AB3-R | 2SA1797L-x-AB3-R | SOT-89 | B | C | E | Tape Reel |
| 2SA1797-x-TN3-R | 2SA1797L-x-TN3-R | TO-252 | B | C | E | Tape Reel |
| 2SA1797-x-TN3-T | 2SA1797L-x-TN3-T | TO-252 | B | C | E | Tube |

| | | |
|-------------------------|--|---|
| <p>2SA1797L-x-AA3-R</p> | <p>(1) Packing Type (2) Package Type (3) Rank (4) Lead Plating</p> | <p>(1) R: Tape Reel, T: Tube (2) AA3: SOT-223, AB3: SOT-89, TN3: TO-252 (3) refer to Classification of h_{FE} (4) L: Lead Free Plating, Blank: Pb/Sn</p> |
|-------------------------|--|---|

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

| PARAMETER | | SYMBOL | RATINGS | UNIT |
|-----------------------------|---------------|-----------|------------|------|
| Collector-Base Voltage | | V_{CBO} | -50 | V |
| Collector-Emitter Voltage | | V_{CEO} | -50 | V |
| Emitter-Base Voltage | | V_{EBO} | -6 | V |
| Collector Power Dissipation | SOT-223 | P_C | 0.8 | |
| | SOT-89 | | 0.5 | W |
| | TO-252 | | 1.9 | W |
| Collector Current | DC | I_C | -2 | A |
| | PULSE(Note 1) | | -5 | A |
| Junction Temperature | | T_J | 150 | °C |
| Storage Temperature | | T_{STG} | -55 ~ +150 | °C |

Note: 1. Single pulse, $P_W=10ms$

2. 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 (Ta=25°C, unless otherwise specified)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|--|-----|-------|-------|---------|
| Collector-base Breakdown Voltage | BV_{CBO} | $I_C = -50\mu A$ | -50 | | | V |
| Collector-emitter Breakdown Voltage | BV_{CEO} | $I_C = -1mA$ | -50 | | | V |
| Emitter-base Breakdown Voltage | BV_{EBO} | $I_E = -50\mu A$ | -6 | | | V |
| Collector Cutoff Current | I_{CBO} | $V_{CB} = -50V$ | | | -0.1 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB} = -5V$ | | | -0.1 | μA |
| Collector-emitter Saturation Voltage | $V_{CE(SAT)}$ | $I_C/I_B = -1A/-50mA$ (Note) | | -0.15 | -0.35 | V |
| DC Current Gain | h_{FE} | $V_{CE} = -2V, I_C = -0.5A$ (Note) | 120 | | 400 | |
| Transition Frequency | f_T | $V_{CE} = -2V, I_E = 0.5A, f = 100MHz$ | | 200 | | MHz |
| Output Capacitance | C_{ob} | $V_{CB} = -10V, I_E = 0A, f = 1MHz$ | | 36 | | pF |

Note: Measured using pulse current.

■ CLASSIFICATION OF h_{FE}

| RANK | A | B |
|-------|---------|---------|
| RANGE | 120-240 | 200-400 |

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