
2SA1617

Silicon PNP Epitaxial

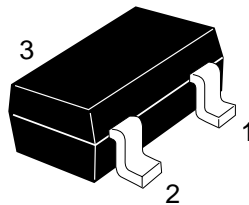
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Application

High voltage amplifier

Outline

MPAK



- 1. Emitter
- 2. Base
- 3. Collector

Absolute Maximum Ratings (Ta = 25°C)

| Item | Symbol | Ratings | Unit |
|------------------------------|-----------|-------------|------|
| Collector to base voltage | V_{CBO} | -55 | V |
| Collector to emitter voltage | V_{CEO} | -50 | V |
| Emitter to base voltage | V_{EBO} | -5 | V |
| Collector current | I_C | -100 | mA |
| Collector power dissipation | P_C | 150 | mW |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -55 to +150 | °C |

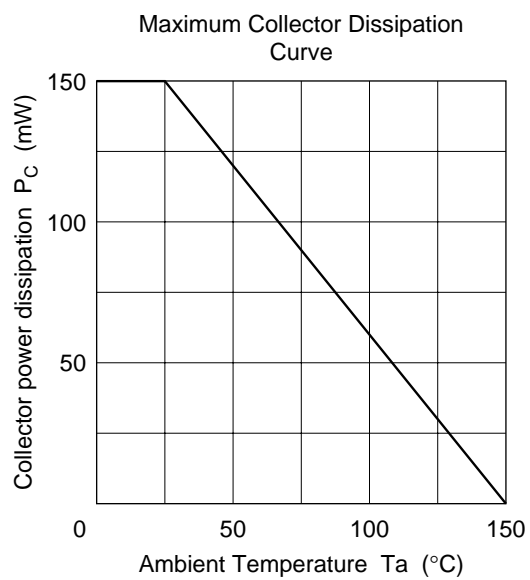
Electrical Characteristics (Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test conditions |
|---|---------------|-----|-----|------|---------|---|
| Collector to base breakdown voltage | $V_{(BR)CBO}$ | -55 | — | — | V | $I_C = -10 \mu A, I_E = 0$ |
| Collector to emitter breakdown voltage | $V_{(BR)CEO}$ | -50 | — | — | V | $I_C = -1 \text{ mA}, R_{BE} = \infty$ |
| Emitter to base breakdown voltage | $V_{(BR)EBO}$ | -5 | — | — | V | $I_E = -10 \mu A, I_C = 0$ |
| Collector cutoff current | I_{CBO} | — | — | -0.5 | μA | $V_{CB} = -30 \text{ V}, I_E = 0$ |
| Emitter cutoff current | I_{EBO} | — | — | -0.5 | μA | $V_{EB} = -2 \text{ V}, I_C = 0$ |
| DC current transfer ratio | h_{FE}^{*1} | 100 | — | 320 | | $V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}$ |
| Collector to emitter saturation voltage | $V_{CE(sat)}$ | — | — | -0.2 | V | $I_C = -10 \text{ mA}, I_B = -1 \text{ mA}$ |
| Base to emitter voltage | V_{BE} | — | — | -0.8 | V | $V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}$ |

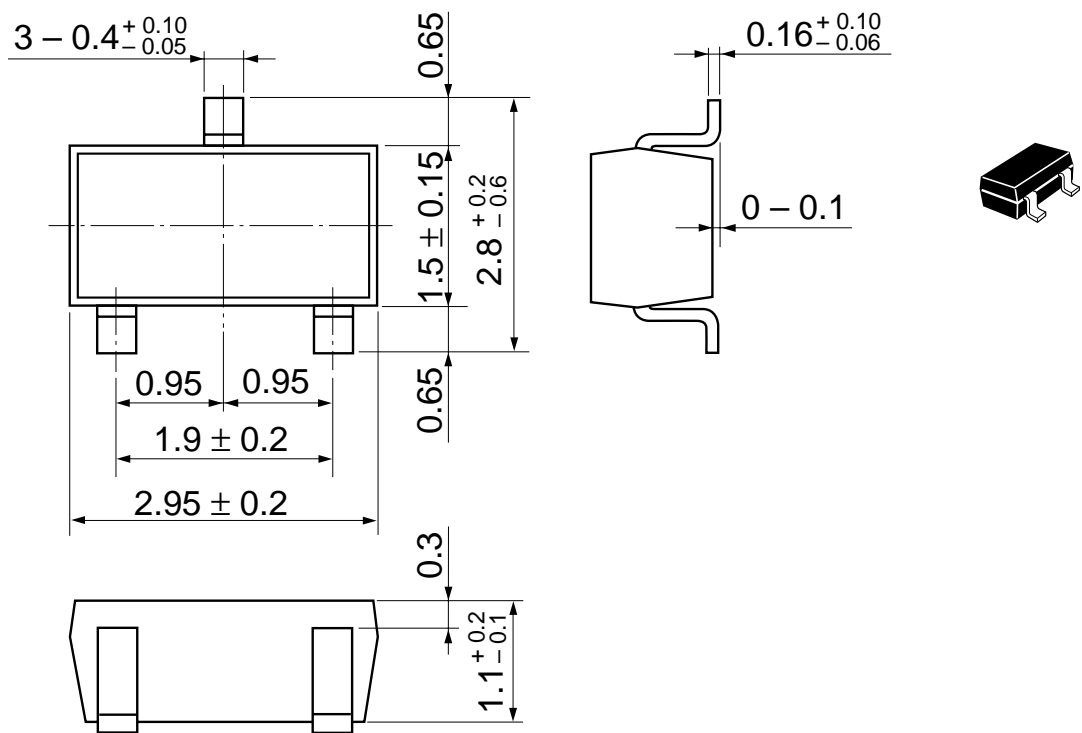
Note: 1. The 2SA1617 is grouped by h_{FE} as follows.

| Grade | B | C |
|----------|------------|------------|
| Mark | VIB | VIC |
| h_{FE} | 100 to 200 | 160 to 320 |

See characteristic curves of 2SA1031



Unit: mm



| | |
|--------------------------|----------|
| Hitachi Code | MPAK |
| JEDEC | — |
| EIAJ | Conforms |
| Weight (reference value) | 0.011 g |

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