2SB1574 (Tentative)

Silicon PNP epitaxial planar type

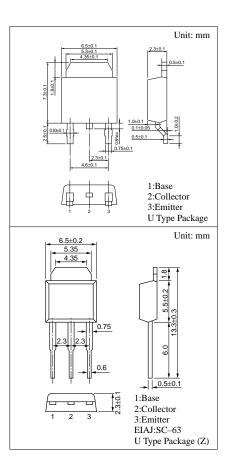
For low-frequency output amplification

Features

- Possible to solder radiation fin directly to printed cicuit boad
- Type with universal characteristics
- Collector breakdown voltage: $V_{CBO}/V_{CEO} = -50V$
- Collector current: $I_C = -2A$

Absolute Maximum Ratings $(T_C=25^{\circ}C)$

| Parameter | Symbol | Ratings | Unit |
|--|------------------|-------------|------|
| Collector to base voltage | V _{CBO} | -50 | V |
| Collector to emitter voltage | V _{CEO} | -50 | V |
| Emitter to base voltage | V _{EBO} | -5 | V |
| Peak collector current | I _{CP} | -3 | A |
| Collector current | I_{C} | -2 | A |
| Collector power dissipation (T _C =25°C) | P _C | 10 | W |
| Junction temperature | T _j | 150 | °C |
| Storage temperature | T _{stg} | -55 to +150 | °C |



Electrical Characteristics (T_C=25°C)

| Parameter | Symbol | Conditions | min | typ | max | Unit |
|---|----------------------|---|-----|--------|-------|------|
| Collector cutoff current | I_{CBO} | $V_{CB} = -10V, I_E = 0$ | | | - 0.1 | μА |
| Collector to base voltage | V _{CBO} | $I_{\rm C} = -10\mu A, I_{\rm E} = 0$ | -50 | | | V |
| Collector to emitter voltage | V _{CEO} | $I_C = -1mA, I_B = 0$ | -50 | | | V |
| Emitter to base voltage | V _{EBO} | $I_{\rm E} = -10\mu A, I_{\rm C} = 0$ | -5 | | | V |
| | h _{FE1} * | $V_{CE} = -2V, I_{C} = -200 \text{mA}$ | 120 | | 340 | |
| Forward current transfer ratio | h _{FE2} | $V_{CE} = -2V, I_{C} = -1A$ | 60 | | | |
| Collector to emitter saturation voltage | V _{CE(sat)} | $I_C = -1A, I_B = -50mA$ | | -0.2 | - 0.3 | V |
| Base to emitter saturation voltage | V _{BE(sat)} | $I_{\rm C} = -1$ A, $I_{\rm B} = -50$ mA | | - 0.85 | -1.2 | V |
| Transition frequency | f_T | $V_{CB} = -10V$, $I_E = 50mA$, $f = 200MHz$ | | 80 | | MHz |
| Collector output capacitance | C _{ob} | $V_{CB} = -10V, I_E = 0, f = 1MHz$ | | 45 | 60 | pF |

*h_{FE1} Rank classification

| Rank | R | S |
|------------------|------------|------------|
| h _{FE1} | 120 to 240 | 170 to 340 |

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